

To: Administration & Finance Committee

Date: 10/11/2022

From: Amber Johnson, Chief Financial Officer

Reviewed by: WC.

SUBJECT: Revised OPEB Actuarial Valuation and GASB 75 Report for Fiscal Year Ending June 30, 2022

Background:

County Connection's actuarial valuation of its Other Post-Employment Benefits (OPEB) for the year ending June 30, 2022 was reviewed and approved by the Administration and Finance Committee and the Board of Directors in September of this year¹.

After the report was approved, staff discovered some minor errors in the calculation of contributions to the plan during the year. As a result, the report has been revised to correct these errors.

OPEB Valuation Report Revisions:

Corrections to the amount contributed to the plan have a ripple effect throughout the report and can be seen in the Deferred Inflow and Outflow calculations, as well as in the Actuarially Determined Contribution (ADC) calculation for the coming year. Fortunately, the correction resulted in a very small change to the ADC, having a de minimis impact on the fiscal position of the Authority's OPEB plan.

The following table summarizes the key elements of the valuation report, and how some of these elements changed between the original and revised version of the report.

| Item | Original Report | Revised Report |
|---|--------------------|--------------------|
| Net OPEB Liability | \$2,933,259 | No change |
| Deferred Outflows of Resources | (1,087,689) | (1,050,713) |
| Deferred Inflows of Resources | 1,873,577 | 1,890,465 |
| OPEB Expense, FYE 6/30/22 | (17,554) | No change |
| Fiduciary Net Position, FYE 6/30/22 | 5,174,920 | No change |
| Employer Contributions, FYE 6/30/22 | 617,452 | 563,588 |
| Actuarially Determined Contribution, FYE 6/30/23 | 531,647 | 530,899 |
| ADC, Net of Implicit Subsidy Credits, FYE 6/30/23 | 445,868 | 445,120 |

Financial Implications:

Based on the revised valuation report, the ADC net of implicit subsidy credits for FY 2023 amounts to \$445,120, which is slightly less than the amount previously reported (\$445,868).

¹ <http://countyconnection.com/wp-content/uploads/2022/09/4.e.-OPEB-Actuarial-Valuation-and-GASB-75-Report-for-Fiscal-Year-Ending-June-30-2022.pdf>

Recommendation:

Staff recommends that the A&F Committee accept the Revised OPEB Actuarial Valuation and forward it to the Board of Directors.

Attachments:

Attachment 1: *Revised* Central Contra Costa Transit Authority Actuarial Valuation of Other Post-Employment Benefit Programs as of June 30, 2021 & GASB 75 Report for the Fiscal Year Ending June 30, 2022

MacLeod Watts

October 7, 2022

Ms. Amber Johnson, CPFO
Chief Financial Officer
Central Contra Costa Transit Authority
2477 Arnold Industrial Way
Concord, CA 94520

Re: Central Contra Costa Transit Authority Other Post-Employment Benefits Actuarial Valuation and GASB 75 Report for Fiscal Year Ending June 30, 2022 - Updated

Dear Ms. Johnson,

We are pleased to enclose our actuarial report providing financial information about the other post-employment benefit (OPEB) liabilities of the Central Contra Costa Transit Authority. *This updated report reflects the final OPEB contributions reported for fiscal year 2022.*

The primary purposes of this report are to:

- 1) Remeasure plan liabilities as of June 30, 2021, in accordance with GASB 75's biennial valuation requirement,
- 2) Develop Actuarially Determined Contributions levels for prefunding plan benefits, and
- 3) Provide information required by GASB 75 ("Accounting and Financial Reporting for Postemployment Benefits Other Than Pension") to be reported in the Authority's financial statements for the fiscal year ending June 30, 2022.

The information included in this report reflects our understanding that the Authority will contribute 100% or more of the Actuarially Determined Contributions each year. We assumed that OPEB trust assets remain in PARS Moderately Conservative portfolio. We based the valuation on the employee data, details on plan benefits and retiree benefit payments reported to us by the Authority. Please review our summary of this information to be comfortable that it matches your records.

We appreciate the opportunity to work on this analysis and acknowledge the efforts of Authority staff who provided valuable time and information to enable us to prepare this report. Please let us know if we can be of further assistance.

Sincerely,

Catherine L. MacLeod, FSA, FCA, EA, MAAA
Principal & Consulting Actuary

Enclosure



Central Contra Costa Transit Authority

Actuarial Valuation of Other
Post-Employment Benefit Programs
As of June 30, 2021

Development of OPEB Prefunding Levels
& GASB 75 Report for the FYE June 20, 2022

Updated October 2022

MacLeod Watts

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A. Executive Summary

This report presents the results of the June 30, 2021, actuarial valuation and accounting information regarding the other post-employment benefit (OPEB) program of the Central Contra Costa Transit Authority (the Authority). The purposes of this report are to: 1) summarize the results of the valuation; 2) develop Actuarially Determined Contribution (ADC) levels for prefunding plan benefits; and 3) provide disclosure information as required by Statement No. 75 of the Governmental Accounting Standards Board (GASB 75) for the fiscal year ending June 30, 2022.

Important background information regarding the valuation process can be found in Addendum 1. We recommend users of the report read this information to familiarize themselves with the process and context of actuarial valuations, including the requirements of GASB 75. The pages following this executive summary present exhibits and other information relevant for disclosures under GASB 75.

Results of the June 30, 2021, valuation may be applied to prepare the Authority's GASB 75 report for the fiscal year ending June 30, 2023. If there are any significant changes in plan members, plan benefits or eligibility and/or OPEB funding policy, an earlier valuation might be required or appropriate.

OPEB Obligations of the Authority

The Authority offers continuation of medical coverage to retiring employees. This benefit creates one or more of the following types of OPEB liabilities:

- **Explicit subsidy liabilities:** An "explicit subsidy" exists when the employer contributes directly toward the cost of retiree healthcare. In this program, the Authority contributes a portion of medical premiums for qualifying retirees. These benefits are described in Section 2.
- **Implicit subsidy liabilities:** An "implicit subsidy" exists when premiums are developed using blended active and retiree claims experience. In this situation, premiums charged for retirees may not be sufficient to cover expected medical claims¹ and the premiums charged for active employees are said to "implicitly subsidize" retirees. This OPEB program includes implicit subsidy liabilities for retiree coverage prior to coverage under Medicare.
- **Other subsidy liabilities:** Pooled plans that do not blend active and retiree premiums likely generate subsidies between employers and retirees within the pool. In the CalPERS medical program, the premium rates for Medicare-covered retirees are based only on retiree claims experience of the pool. A recent actuarial practice note indicated these subsidies should be included in plan liabilities to the extent they are paid by the employer.² We generally expect these subsidies to be small and included any such liability with the implicit subsidy liability in this report.

We determine explicit subsidy liabilities using the expected direct payments promised by the plan toward retiree coverage. We determine the implicit and other subsidy liabilities as the projected difference between (a) retiree medical claim costs by age and (b) premiums charged for retiree coverage. For more information on this process Addendum 2: MacLeod Watts Age Rating Methodology.

¹ In rare situations, premiums for retiree coverage may be high enough that they subsidize active employees' claims.

² Exceptions exist for: 1) Medicare Advantage Plans: these plans are treated as if their premiums are age-based due to the nature of the Federal subsidies paid to these plans. 2) Plans with low explicit subsidies to Medicare-covered retirees: in these plans no part of any potential pool subsidy is expected to be paid by the employer.



Executive Summary

(Continued)

OPEB Funding Policy

The Authority's OPEB funding policy affects the calculation of liabilities by impacting the discount rate that is used to develop the plan liability and expense. "Prefunding" is the term used when an agency consistently contributes an amount based on an actuarially determined contribution (ADC) each year. GASB 75 allows prefunded plans to use a discount rate that reflects the expected earnings on trust assets. Pay-as-you-go, or "PAYGO", is the term used when an agency only contributes the required retiree benefits when due. When an agency finances retiree benefits on a pay-as-you-go basis, GASB 75 requires the use of a discount rate equal to a 20-year high grade municipal bond rate.

The Authority continues to prefund its OPEB liability, consistently contributing 100% or more of the Actuarially Determined Contributions each year. With the Authority's approval, the discount rate used for accounting purposes and to develop Actuarially Determined Contributions for plan funding is 4.75%. This rate reflects the current expectation of the long-term return on trust assets, based on information provided by PARS in April 2022. This rate is lower than the 5.10% return determined from prior PARS return projections. For more information, see Expected Return on Trust Assets on page 12.

Actuarial Assumptions

The actuarial "demographic" assumptions (i.e., rates of retirement, death, disability or other termination of employment) used in this report were chosen, for the most part, to be the same as the actuarial demographic assumptions used for the most recent valuation of the retirement plan(s) covering Authority employees. Other assumptions, such as age-related healthcare claims, healthcare trend, retiree participation rates and spouse coverage, were selected based on demonstrated plan experience and/or our best estimate of expected future experience. All these assumptions, and more, impact expected future benefits. Please note that this valuation has been prepared on a closed group basis. This means that only employees and retirees present as of the valuation date are considered. We do not consider replacement employees for those we project to leave the current population of plan participants until the valuation date following their employment.

We emphasize that this actuarial valuation provides a projection of future results based on many assumptions. Actual results are likely to vary to some extent and we will continue to monitor these assumptions in future valuations. See Section 3 for a description of assumptions used in this valuation.

Important Dates for GASB 75 in this Report

GASB 75 allows reporting liabilities as of any fiscal year end based on: (1) a *valuation date* no more than 30 months plus 1 day prior to the close of the fiscal year end; and (2) a *measurement date* up to one year prior to the close of the fiscal year. The following dates were used for this report:

| | |
|--------------------|---------------------------------|
| Fiscal Year End | June 30, 2022 |
| Measurement Date | June 30, 2021 |
| Measurement Period | June 30, 2020, to June 30, 2021 |
| Valuation Date | June 30, 2021 |



Executive Summary**(Concluded)****Significant Results and Differences from the Prior Valuation**

No benefit changes were reported to MacLeod Watts relative to those in place at the time the June 2019 valuation was prepared. We reviewed and updated certain assumptions used to project the OPEB liability. We also collected updated census and premium data and recognized “plan experience”, the differences between projected and actual results. Investment experience was also recognized, with higher than expected return on trust assets.

The Net OPEB Liability on the current measurement date is higher than that reported one year ago. Section C. presents the new valuation results and provides additional information on the impact of the new assumptions and plan experience. See *Recognition Period for Deferred Resources* on page 13 for details on how these changes are recognized.

Impact on Statement of Net Position and OPEB Expense for Fiscal Year Ending 2022

The plan’s impact to Net Position will be the sum of difference between assets and liabilities as of the measurement date plus the unrecognized net outflows and inflows of resources. Different recognition periods apply to deferred resources depending on their origin. The plan’s impact on Net Position on the measurement date can be summarized as follows:

| Items | For Reporting At Fiscal Year Ending June 30, 2022 |
|--|---|
| Total OPEB Liability | \$ 8,108,179 |
| Fiduciary Net Position | (5,174,920) |
| Net OPEB Liability | \$ 2,933,259 |
| <i>Adjustment for Deferred Resources:</i> | |
| Deferred (Outflows) | (1,061,361) |
| Deferred Inflows | 1,890,465 |
| Impact on Statement of Net Position | \$ 3,762,363 |
| OPEB Expense, FYE 6/30/2022 | \$ (17,554) |

Important Notices

This report is intended to be used only to present the actuarial information relating to other postemployment benefits for the Authority’s financial statements. The results of this report may not be appropriate for other purposes, where other assumptions, methodology and/or actuarial standards of practice may be required or more suitable. We note that various issues in this report may involve legal analysis of applicable law or regulations. The Authority should consult counsel on these matters; MacLeod Watts does not practice law and does not intend anything in this report to constitute legal advice. In addition, we recommend the Authority consult with their internal accounting staff or external auditor or accounting firm about the accounting treatment of OPEB liabilities.

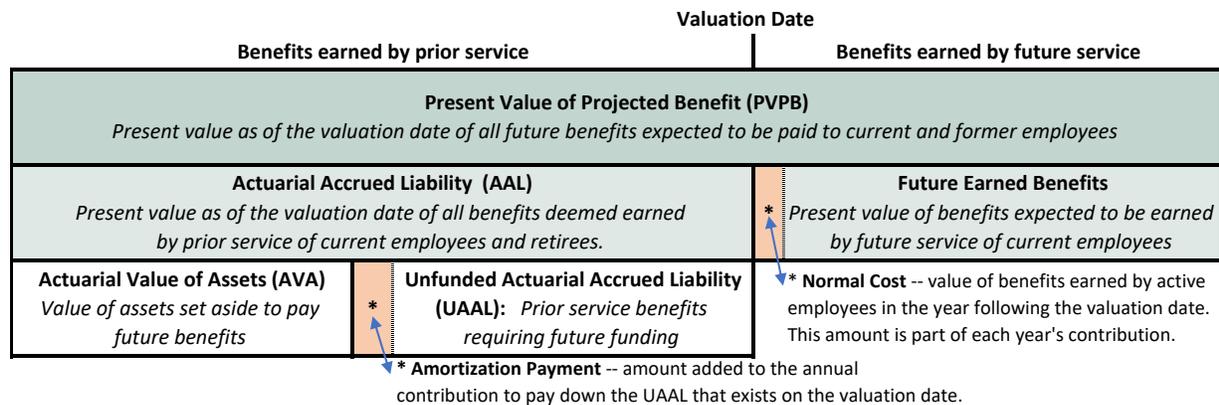


B. Valuation Process

This valuation is based on employee census data and benefits initially submitted by the Authority and clarified in various related communications. A summary of the employee data is provided in Section 1 and a summary of the plan benefits is provided in Section 2. While individual employee records have been reviewed to verify that they are reasonable in various respects, the data has not been audited and we have otherwise relied on the Authority as to its accuracy. The valuation has been performed in accordance with the process described below using the actuarial methods and assumptions described in Section 3 and is consistent with our understanding of Actuarial Standards of Practice.

In projecting benefit values and liabilities, we first determine an expected premium or benefit stream over each current retiree’s or active employee’s future retirement. Benefits may include both direct employer payments (explicit subsidies) and any implicit subsidies arising when retiree premiums are expected to be partially subsidized by premiums paid for active employees. The projected benefit streams reflect assumed trends in the cost of those benefits and assumptions as to the expected dates when benefits will end. Assumptions regarding the probability that each employee will remain in service to receive benefits and the likelihood the employee will elect coverage for themselves and their dependents are also applied.

We then calculate a present value of these future benefit streams by discounting the value of each future expected employer payment back to the valuation date using the valuation discount rate. This present value is called the **Present Value of Projected Benefits (PVPB)** and represents the current value of all expected future plan payments to current retirees and current active employees. Note that this long-term projection does not anticipate entry of future employees.



The next step in the valuation process splits the Present Value of Projected Benefits into 1) the value of benefits already earned by prior service of current employees and retirees and 2) the value of benefits expected to be earned by future service of current employees. Actuaries employ an “attribution method” to divide the PVPB into prior service liabilities and future service liabilities. For this valuation we used the **Entry Age Normal** attribution method. This method is the most common used for government funding purposes and the only attribution method allowed for financial reporting under GASB 75.

We call the value of benefits deemed earned by prior service the **Actuarial Accrued Liability (AAL)**. Benefits deemed earned by service of active employees in a single year is called the **Normal Cost** of



Valuation Process**(Concluded)**

benefits. The present value of all future normal costs (PVFNC) plus the Actuarial Accrued Liability will equal the Present Value of Projected Benefits (i.e., $PVPB = AAL + PVFNC$).

The difference between the value of trust assets (i.e., the Market Value of Assets), or a smoothed asset value (i.e., the Actuarial Value of Assets), and the Actuarial Accrued Liability yields the **Unfunded Actuarial Accrued Liability (UAAL)**. The UAAL represents, as of the valuation date, the present value of benefits already earned by past service that remain unfunded. A plan is generally considered “fully funded” when the UAAL is zero. The plan sponsor of a fully funded plan will still need to make future contributions for benefits earned by future service of active employees. But in a fully funded plan, the plan sponsor has set aside sufficient assets to pay for benefits that have been earned by past service of current retirees and active employees if all valuation assumptions are realized.

Future contributions by the Authority will fund 1) the remaining part of OPEB benefits earned by past service (the Unfunded Actuarial Accrued Liability) and 2) the value of benefits earned each year by service of active employees. Various strategies might be employed to pay down the UAAL such as longer or shorter amortization payments, and flat or escalating payments depending on the plan sponsors goals and funding philosophy.

Variation in Future Results

Please note that projections of future benefits over such long periods (frequently 70 or more years) which are dependent on numerous assumptions regarding future economic and demographic variables are subject to substantial revision as future events unfold. While we believe that the assumptions and methods used in this valuation are reasonable for the purposes of this report, the costs to the Authority reflected in this report are subject to future revision, perhaps materially. Demonstrating the range of potential future plan costs was beyond the scope of our assignment except to the limited extent of providing liability information at various discount rates.

Certain actuarial terms and GASB 75 terms may be used interchangeably, as shown below. Specific results from this valuation are provided in the following Section C.

| Actuarial Terminology | GASB 75 Terminology |
|---|----------------------------|
| Present Value of Projected Benefits (PVPB) | <i>No equivalent term</i> |
| Actuarial Accrued Liability (AAL) | Total OPEB Liability (TOL) |
| Market Value of Assets (MVA) | Fiduciary Net Position |
| Actuarial Value of Assets (AVA) | <i>No equivalent term</i> |
| Unfunded Actuarial Accrued Liability (UAAL) | Net OPEB Liability |
| Normal Cost | Service Cost |

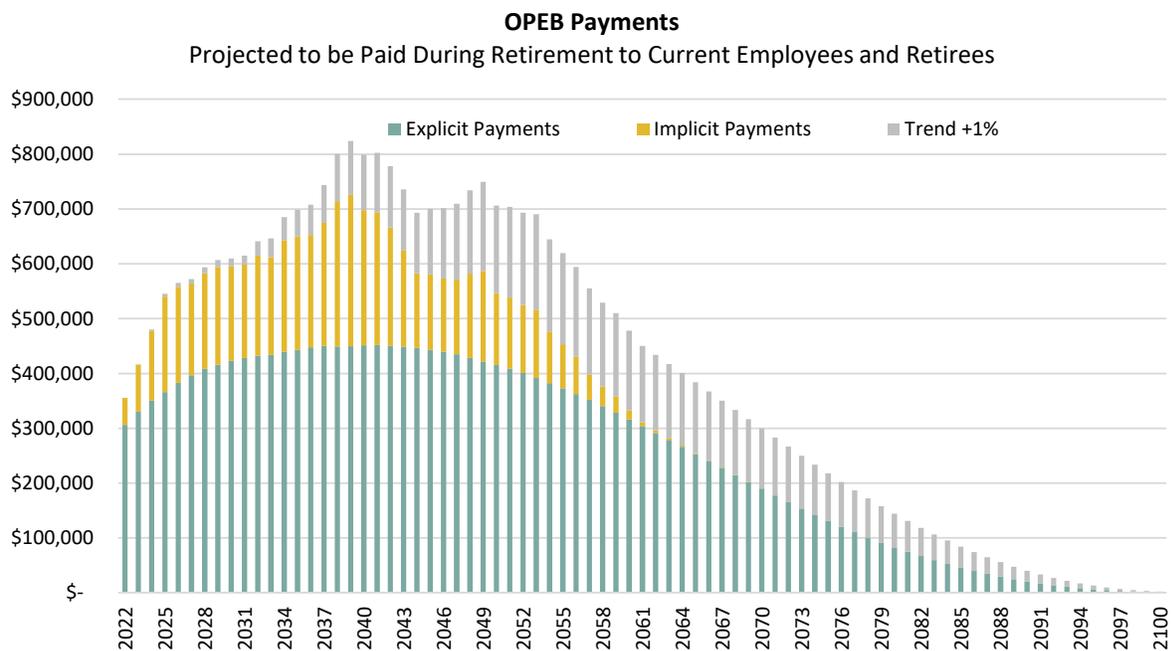


C. Valuation Results as of June 30, 2021

This section presents the basic results of our recalculation of the OPEB liability using the updated employee data, plan provisions and asset information provided to us for the June 2021 valuation. We described the general process for projecting all future benefits to be paid to retirees and current employees in the preceding Section. Expected annual benefits have been projected on the basis of the actuarial assumptions outlined in Supporting Information, Section 3.

Lifetime healthcare benefits are paid for qualifying Authority retirees. Please see Supporting Information, Section 2 for details.

The following graph illustrates the annual other post-employment benefits projected to be paid on behalf of current retirees and current employees expected to retire from the Authority.



The amounts shown in green reflect the expected payment by the Authority toward retiree medical premiums while those in yellow reflect the implicit subsidy benefits (i.e., the excess of estimated retiree medical and prescription drug claims over the premiums expected to be charged during the year for retirees' coverage). The projections in gray reflect increases in benefit levels if healthcare trend were 1% higher.

The first 15 years of benefit payments from the graph above are shown in tabular form on page 20.

Liabilities relating to these projected benefits are shown beginning on the following page.



Valuation Results as of June 30, 2021

(Continued)

This chart compares the results measured as of June 30, 2020, with the results measured as of June 30, 2021, based on the current valuation.

| Valuation Date | 6/30/2019 | | | 6/30/2021 | | |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Fiscal Year Ending | 6/30/2021 | | | 6/30/2022 | | |
| Measurement Date | 6/30/2020 | | | 6/30/2021 | | |
| Discount rate | 5.10% | | | 4.75% | | |
| Number of Covered Employees | | | | | | |
| Actives | 212 | | | 199 | | |
| Retirees | 54 | | | 64 | | |
| Total Participants | 266 | | | 263 | | |
| OPEB Subsidy Type | Explicit | Implicit | Total | Explicit | Implicit | Total |
| Actuarial Present Value of Projected Benefits | | | | | | |
| Actives | \$ 5,103,249 | \$ 2,428,115 | \$ 7,531,364 | \$ 4,722,032 | \$ 2,812,810 | \$ 7,534,842 |
| Retirees | 2,286,817 | (31,965) | 2,254,852 | 3,024,764 | 31,010 | 3,055,774 |
| Total APVPB | 7,390,066 | 2,396,150 | 9,786,216 | 7,746,796 | 2,843,820 | 10,590,616 |
| Total OPEB Liability (TOL) | | | | | | |
| Actives | 3,575,907 | 1,653,361 | 5,229,268 | 3,083,512 | 1,968,893 | 5,052,405 |
| Retirees | 2,286,817 | (31,965) | 2,254,852 | 3,024,764 | 31,010 | 3,055,774 |
| TOL | 5,862,724 | 1,621,396 | 7,484,120 | 6,108,276 | 1,999,903 | 8,108,179 |
| Fiduciary Net Position | | | 4,458,932 | | | 5,174,920 |
| Net OPEB Liability | | | 3,025,188 | | | 2,933,259 |
| Service Cost | | | | | | |
| For the period following the measurement date | 225,790 | 103,009 | 328,799 | 209,966 | 104,205 | 314,171 |

The Net OPEB Liability has decreased by \$91,929 from that reported one year ago. The NOL was expected to decrease by \$60,496, reflecting additional service and interest costs accruing for the period offset by trust contributions and expected earnings. Unexpected changes are discussed on the following page.



Other Post-Employment Benefit Program of the Central Contra Costa Transit Authority
June 30, 2021, Actuarial Valuation and GASB 75 Report for Fiscal Year Ending June 30, 2022

Valuation Results as of June 30, 2021**(Concluded)**

Unexpected changes decreased the Net OPEB Liability by \$31,433 and fall into one of these categories:

- *Investment experience*: Trust asset return exceeded the expected earnings by \$263,622.
- *Plan experience* recognizes results which are different than expected based on the prior valuation data and assumptions. Plan experience decreased the TOL by \$184,833.
- *Assumption changes* collectively increased the TOL by \$417,022. These changes are listed below, with additional information provided on the last page in Supporting Information, Section 3.

This chart reconciles results measured as of June 30, 2020, to results measured as of June 30, 2021.

| Reconciliation of Changes During Measurement Period | Total OPEB Liability (a) | Fiduciary Net Position (b) | Net OPEB Liability (c) = (a) - (b) |
|--|-----------------------------------|-------------------------------------|---|
| Balance at Fiscal Year Ending 6/30/2021 <i>Measurement Date 6/30/2020</i> | \$ 7,484,120 | \$ 4,458,932 | \$ 3,025,188 |
| Expected Changes During the Period: | | | |
| Service Cost | 328,799 | | 328,799 |
| Interest Cost | 390,119 | | 390,119 |
| Expected Investment Income | | 232,999 | (232,999) |
| Employer Contributions | | 546,415 | (546,415) |
| Benefit Payments | (327,048) | (327,048) | - |
| Total Expected Changes During the Period | 391,870 | 452,366 | (60,496) |
| Expected at Fiscal Year Ending 6/30/2022 <i>Measurement Date 6/30/2021</i> | \$ 7,875,990 | \$ 4,911,298 | \$ 2,964,692 |
| Unexpected Changes During the Period: | | | |
| Change Due to Investment Experience | | 263,622 | (263,622) |
| <i>Plan Experience:</i> | | | |
| Premiums and estimated claims other than expected | 218,803 | | |
| Turnover other than expected | (276,702) | | |
| More retiree deaths than expected | (94,806) | | |
| Other plan experience | (32,128) | | |
| Change Due to Plan Experience | | | (184,833) |
| <i>Assumption Changes:</i> | | | |
| Change in assumed trust return/discount rate | 190,206 | | |
| Change in healthcare trend | (26,903) | | |
| Updated assumed retiree participation rates | (50,891) | | |
| Decreased assumed spouse coverage of future retirees | (268,682) | | |
| Updated mortality improvement scale | 113,115 | | |
| Added post-65 implicit liability for 2 members not paying Medicare tax | 483,989 | | |
| Valued post-65 pool subsidy for applicable Medicare plans | (23,812) | | |
| Change Due to Assumption Changes | | | 417,022 |
| Total Unexpected Changes During the Period | 232,189 | 263,622 | (31,433) |
| Balance at Fiscal Year Ending 6/30/2022 <i>Measurement Date 6/30/2021</i> | \$ 8,108,179 | \$ 5,174,920 | \$ 2,933,259 |



D. Accounting Information (GASB 75)

The following exhibits are designed to satisfy the reporting and disclosure requirements of GASB 75 for the fiscal year end June 30, 2022.

Components of Net Position and Expense

The exhibit below shows the development of Net Position and Expense as of the Measurement Date.

| Plan Summary Information for FYE June 30, 2022 <i>Measurement Date is June 30, 2021</i> | CCCTA |
|---|----------------------------|
| Items Impacting Net Position: | |
| Total OPEB Liability | \$ 8,108,179 |
| Fiduciary Net Position | <u>(5,174,920)</u> |
| Net OPEB Liability (Asset) | 2,933,259 |
| <i>Deferred (Outflows) Due to:</i> | |
| Assumption Changes | (470,237) |
| Plan Experience | - |
| Investment Experience | (16,888) |
| Deferred Contributions | (574,236) |
| <i>Deferred Inflows Due to:</i> | |
| Assumption Changes | 302,318 |
| Plan Experience | 1,357,477 |
| Investment Experience | <u>230,670</u> |
| Impact on Statement of Net Position, FYE 6/30/2022 | <u>\$ 3,762,363</u> |
| Items Impacting OPEB Expense: | |
| Service Cost | \$ 328,799 |
| Cost of Plan Changes | - |
| Interest Cost | 390,119 |
| Expected Earnings on Assets | (232,999) |
| <i>Recognition of Deferred Outflows:</i> | |
| Assumption Changes | 93,599 |
| Plan Experience | - |
| Investment Experience | 22,674 |
| <i>Recognition of Deferred (Inflows):</i> | |
| Assumption Changes | (138,511) |
| Plan Experience | (419,217) |
| Investment Experience | <u>(62,018)</u> |
| OPEB Expense, FYE 6/30/2022 | <u>\$ (17,554)</u> |



Accounting Information

(Continued)

Change in Net Position During the Fiscal Year

The exhibit below shows the year-to-year changes in the components of Net Position.

| For Reporting at Fiscal Year End <i>Measurement Date</i> | 6/30/2021 <i>6/30/2020</i> | 6/30/2022 <i>6/30/2021</i> | Change During Period |
|---|-------------------------------|-------------------------------|----------------------------|
| Total OPEB Liability | \$ 7,484,120 | \$ 8,108,179 | \$ 624,059 |
| Fiduciary Net Position | <u>(4,458,932)</u> | <u>(5,174,920)</u> | <u>(715,988)</u> |
| Net OPEB Liability (Asset) | 3,025,188 | 2,933,259 | (91,929) |
| <i>Deferred (Outflows) Due to:</i> | | | |
| Assumption Changes | (146,814) | (470,237) | (323,423) |
| Plan Experience | - | - | - |
| Investment Experience | (39,562) | (16,888) | 22,674 |
| Deferred Contributions | (546,415) | (574,236) | (27,821) |
| <i>Deferred Inflows Due to:</i> | | | |
| Assumption Changes | 440,829 | 302,318 | (138,511) |
| Plan Experience | 1,591,861 | 1,357,477 | (234,384) |
| Investment Experience | <u>29,066</u> | <u>230,670</u> | <u>201,604</u> |
| Impact on Statement of Net Position | <u>\$ 4,354,153</u> | <u>\$ 3,762,363</u> | <u>\$ (591,790)</u> |

Change in Net Position During the Fiscal Year

| | |
|--|---------------------|
| Impact on Statement of Net Position, FYE 6/30/2021 | \$ 4,354,153 |
| OPEB Expense (Income) | (17,554) |
| Employer Contributions During Fiscal Year | <u>(574,236)</u> |
| Impact on Statement of Net Position, FYE 6/30/2022 | <u>\$ 3,762,363</u> |

OPEB Expense

| | |
|---|--------------------|
| Employer Contributions During Fiscal Year | \$ 574,236 |
| Deterioration (Improvement) in Net Position | <u>(591,790)</u> |
| OPEB Expense (Income), FYE 6/30/2022 | <u>\$ (17,554)</u> |



Accounting Information

(Continued)

Change in Fiduciary Net Position During the Measurement Period

| | CCCTA |
|---|---------------------|
| Fiduciary Net Position at Fiscal Year Ending 6/30/2021 | \$ 4,458,932 |
| <i>Measurement Date 6/30/2020</i> | |
| Changes During the Period: | |
| Investment Income | 496,621 |
| Employer Contributions | 546,415 |
| Benefit Payments | (327,048) |
| Net Changes During the Period | 715,988 |
| Fiduciary Net Position at Fiscal Year Ending 6/30/2022 | \$ 5,174,920 |
| <i>Measurement Date 6/30/2021</i> | |

Expected Long-term Return on Trust Assets

In April 2022, PARS published an expected return of 5.30% for the Moderately Conservative, prior to offset for non-imbedded investment related fees. This expected return was determined using a building-block method and best-estimate ranges of expected future real rates of return for each major asset class (expected returns, net of OPEB plan investment expense and inflation). These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major class are summarized in this table.

| Portfolio (Investment Strategy) | Expected Return | Moderately Conservative Weight |
|---------------------------------|-----------------|--------------------------------|
| Equity | | 30.00% |
| Large Cap Core | 6.80% | 15.50% |
| Mid Cap Core | 7.10% | 3.00% |
| Small Cap Core | 7.90% | 4.50% |
| Real Estate | 6.60% | 1.00% |
| International | 7.30% | 4.00% |
| Emerging Markets | 7.30% | 2.00% |
| Fixed Income | | 65.00% |
| Short Term Bond | 3.30% | 14.00% |
| Intermediate Term Bond | 3.90% | 49.25% |
| High Yield | 6.10% | 1.75% |
| Alternatives | | |
| Cash | 2.40% | 5.00% |
| Expected Return | | 5.30% |
| Expected Standard Deviation | | 5.28% |

Non-imbedded fees were estimated to reduce the expected yield above by 55 basis points (0.55%), reducing the net expected return on trust assets to 4.75% per year. Because the Authority is contributing at or above the ADC level each year, we used 4.75% as the discount rate to determine the OPEB liability in the plan.



Accounting Information

(Continued)

Recognition Period for Deferred Resources

Liability changes due to plan experience which differs from what was assumed in the prior measurement period and/or from assumption changes during the period are recognized over the plan's Expected Average Remaining Service Life ("EARSL"). The EARSL of 6.51 years is the period used to recognize such changes in the OPEB Liability arising during the current measurement period.

When applicable, changes in the Fiduciary Net Position due to investment performance different from the assumed earnings rate are always recognized over 5 years.

Liability changes attributable to benefit changes occurring during the period, if any, are recognized immediately.

Deferred Resources as of Fiscal Year End and Expected Future Recognition

The exhibit below shows deferred resources as of the fiscal year end June 30, 2022.

| Central Contra Costa Transit Authority | Deferred Outflows of Resources | Deferred Inflows of Resources |
|---|--------------------------------|-------------------------------|
| Changes of Assumptions | \$ 470,237 | \$ 302,318 |
| Differences Between Expected and Actual Experience | - | 1,357,477 |
| Net Difference Between Projected and Actual Earnings on Investments | - | 213,782 |
| Deferred Contributions | 574,236 | - |
| Total | \$ 1,044,473 | \$ 1,873,577 |

In addition, future recognition of these deferred resources is shown below.

| For the Fiscal Year Ending June 30 | Recognized Net Deferred Outflows (Inflows) of Resources |
|------------------------------------|---|
| 2023 | \$ (509,259) |
| 2024 | (526,147) |
| 2025 | (244,515) |
| 2026 | (177,273) |
| 2027 | 35,667 |
| Thereafter | 18,187 |



Accounting Information

(Continued)

Sensitivity of Liabilities to Changes in the Discount Rate and Healthcare Cost Trend Rate

The discount rate used for accounting purposes for the fiscal year end 2022 is 4.75%. Healthcare Cost Trend Rate was assumed to start at 5.8% (increase effective January 1, 2023) and grade down to 3.9% for years 2076 and later. The impact of a 1% increase or decrease in these assumptions is shown in the chart below.

| Sensitivity to: | | | |
|---|-------------------------------|--------------------------|-------------------------------|
| Change in Discount Rate | Current - 1% 3.75% | Current 4.75% | Current + 1% 5.75% |
| Total OPEB Liability | 9,105,436 | 8,108,179 | 7,275,314 |
| Increase (Decrease) | 997,257 | | (832,865) |
| % Increase (Decrease) | 12.3% | | -10.3% |
| Net OPEB Liability (Asset) | 3,930,516 | 2,933,259 | 2,100,394 |
| Increase (Decrease) | 997,257 | | (832,865) |
| % Increase (Decrease) | 34.0% | | -28.4% |
| Change in Healthcare Cost Trend Rate | Current Trend - 1% | Current Trend | Current Trend + 1% |
| Total OPEB Liability | 7,478,060 | 8,108,179 | 8,967,037 |
| Increase (Decrease) | (630,119) | | 858,858 |
| % Increase (Decrease) | -7.8% | | 10.6% |
| Net OPEB Liability (Asset) | 2,303,140 | 2,933,259 | 3,792,117 |
| Increase (Decrease) | (630,119) | | 858,858 |
| % Increase (Decrease) | -21.5% | | 29.3% |



Other Post-Employment Benefit Program of the Central Contra Costa Transit Authority
June 30, 2021, Actuarial Valuation and GASB 75 Report for Fiscal Year Ending June 30, 2022

Accounting Information

(Continued)

Schedule of Changes in the Authority's Net OPEB Liability and Related Ratios

GASB 75 requires presentation of the 10-year history of changes in the Net OPEB Liability. Results for years since GASB 75 was implemented (fiscal years 2018 through 2022) are shown in the table.

| Fiscal Year Ending | FYE 2022 | FYE 2021 | FYE 2020 | FYE 2019 | FYE 2018 |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| <i>Measurement Date</i> | 6/30/2021 | 6/30/2020 | 6/30/2019 | 6/30/2018 | 6/30/2017 |
| <i>Discount Rate on Measurement Date</i> | 4.75% | 5.10% | 5.10% | 5.10% | 5.10% |
| Total OPEB liability | | | | | |
| Service Cost | \$ 328,799 | \$ 318,449 | \$ 331,211 | \$ 320,785 | \$ 350,850 |
| Interest | 390,119 | 369,885 | 406,509 | 385,114 | 482,126 |
| Changes of benefit terms | - | - | - | - | - |
| Differences between expected and actual experience | (184,833) | - | (1,357,116) | - | (1,408,629) |
| Changes of assumptions | 417,022 | - | 205,894 | - | (994,873) |
| Benefit payments | (327,048) | (276,823) | (306,893) | (286,733) | (316,489) |
| Net change in total OPEB liability | 624,059 | 411,511 | (720,395) | 419,166 | (1,887,015) |
| Total OPEB liability - beginning | 7,484,120 | 7,072,609 | 7,793,004 | 7,373,838 | 9,260,853 |
| Total OPEB liability - ending (a) | \$ 8,108,179 | \$ 7,484,120 | \$ 7,072,609 | \$ 7,793,004 | \$ 7,373,838 |
| Plan fiduciary net position | | | | | |
| Contributions - employer | \$ 546,415 | \$ 529,577 | \$ 606,839 | \$ 588,345 | \$ 748,139 |
| Net investment income | 496,621 | 215,875 | 224,930 | 80,538 | 111,685 |
| Benefit payments | (327,048) | (276,823) | (306,893) | (286,733) | (316,489) |
| Administrative expenses | - | - | - | (1,550) | - |
| Net change in plan fiduciary net position | 715,988 | 468,629 | 524,876 | 380,600 | 543,335 |
| Plan fiduciary net position - beginning | 4,458,932 | 3,990,303 | 3,465,427 | 3,084,827 | 2,541,492 |
| Plan fiduciary net position - ending (b) | \$ 5,174,920 | \$ 4,458,932 | \$ 3,990,303 | \$ 3,465,427 | \$ 3,084,827 |
| Net OPEB liability - ending (a) - (b) | \$ 2,933,259 | \$ 3,025,188 | \$ 3,082,306 | \$ 4,327,577 | \$ 4,289,011 |
| Covered-employee payroll | \$ 14,326,765 | \$ 15,543,046 | \$ 15,503,972 | \$ 14,836,604 | \$ 12,531,658 |
| Net OPEB liability as a % of covered-employee payroll | 20.47% | 19.46% | 19.88% | 29.17% | 34.23% |



Other Post-Employment Benefit Program of the Central Contra Costa Transit Authority
June 30, 2021, Actuarial Valuation and GASB 75 Report for Fiscal Year Ending June 30, 2022

Accounting Information

(Continued)

Schedule of Contributions

The chart below shows the Actuarially Determined Contribution (ADC), the Authority's contribution, and the excess or shortfall.

| Fiscal Year Ending | FYE 2022 | FYE 2021 | FYE 2020 | FYE 2019 | FYE 2018 |
|---|---------------|---------------|---------------|---------------|---------------|
| Actuarially Determined Contribution | \$ 561,678 | \$ 545,410 | \$ 529,577 | \$ 606,839 | \$ 588,345 |
| Contributions in relation to the actuarially determined contribution | 574,236 | 546,415 | 529,577 | 606,839 | 588,345 |
| Contribution deficiency (excess) | \$ (12,558) | \$ (1,005) | \$ - | \$ - | \$ - |
| Covered employee payroll | \$ 16,518,765 | \$ 14,326,765 | \$ 15,543,046 | \$ 15,503,972 | \$ 14,836,604 |
| Contributions as a percentage of covered employee payroll | 3.48% | 3.81% | 3.41% | 3.91% | 3.97% |

Notes to Schedule - assumptions used to develop Actuarially Determined Contributions

| | | | | | |
|-----------------------------|--|--------------------|--------------------|--|--------------------|
| Valuation Date | 6/30/2019 | | | 7/1/2017 | |
| Actuarial cost method | Entry Age Normal Level % of Pay | | | Entry Age Normal Level % of Pay | |
| Amortization method | Level % of Payroll 30 year closed | | | Level % of Payroll 30 year closed | |
| Amortization period | 18 years remain | 19 years remain | 20 years remain | 21 years remain | 22 years remain |
| Asset valuation method | Market Value | | | Market Value | |
| Investment rate of return | 5.10% | | | 5.10% | |
| Inflation | 2.75% | | | 2.75% | |
| Salary increases | 3.25% | | | 3.25% | |
| Healthcare cost trend rates | 6.5% in 2021, step down 0.5% per year to 5% in 2024 | | | 7.5% in 2019, step down 0.5% per year to 5% in 2024 | |
| Retirement age | 50 to 75 | | | 50 to 75 | |
| Mortality | 2017 CalPERS Experience Study | | | 2014 CalPERS Experience Study | |
| Mortality Improvement | MacLeod Watts Scale 2018 | | | MacLeod Watts Scale 2017 | |



Accounting Information

(Continued)

Detail of Changes to Net Position

The chart below details changes to all components of Net Position.

| Central Contra Costa Transit Authority | Total OPEB Liability (a) | Fiduciary Net Position (b) | Net OPEB Liability (c) = (a) - (b) | (d) Deferred Outflows: | | | (e) Deferred Inflows: | | | Impact on Statement of Net Position (f) = (c) - (d) + (e) | |
|---|--------------------------|----------------------------|------------------------------------|------------------------|-----------------|-----------------------|------------------------|--------------------|-----------------|---|-----------------------|
| | | | | Assumption Changes | Plan Experience | Investment Experience | Deferred Contributions | Assumption Changes | Plan Experience | | Investment Experience |
| Balance at Fiscal Year Ending 6/30/2021 <i>Measurement Date 6/30/2020</i> | \$ 7,484,120 | \$ 4,458,932 | \$ 3,025,188 | \$ 146,814 | \$ - | \$ 39,562 | \$ 546,415 | \$ 440,829 | \$ 1,591,861 | \$ 29,066 | \$ 4,354,153 |
| Changes During the Period: | | | | | | | | | | | |
| Service Cost | 328,799 | | 328,799 | | | | | | | | 328,799 |
| Interest Cost | 390,119 | | 390,119 | | | | | | | | 390,119 |
| Expected Investment Income | | 232,999 | (232,999) | | | | | | | | (232,999) |
| Employer Contributions | | 546,415 | (546,415) | | | | | | | | (546,415) |
| Changes of Benefit Terms | - | | - | | | | | | | | - |
| Benefit Payments | (327,048) | (327,048) | - | | | | | | | | - |
| Assumption Changes | 417,022 | | 417,022 | 417,022 | | | | | | | - |
| Plan Experience | (184,833) | | (184,833) | | | | | | 184,833 | | - |
| Investment Experience | | 263,622 | (263,622) | | | | | | | 263,622 | - |
| Recognized Deferred Resources | | | | (93,599) | - | (22,674) | (546,415) | (138,511) | (419,217) | (62,018) | 42,942 |
| Employer Contributions in Fiscal Year | | | | | | | 574,236 | | | | (574,236) |
| Net Changes in Fiscal Year 2021-2022 | 624,059 | 715,988 | (91,929) | 323,423 | - | (22,674) | 27,821 | (138,511) | (234,384) | 201,604 | (591,790) |
| Balance at Fiscal Year Ending 6/30/2022 <i>Measurement Date 6/30/2021</i> | \$ 8,108,179 | \$ 5,174,920 | \$ 2,933,259 | \$ 470,237 | \$ - | \$ 16,888 | \$ 574,236 | \$ 302,318 | \$ 1,357,477 | \$ 230,670 | \$ 3,762,363 |



Accounting Information

(Continued)

Schedule of Deferred Outflows and Inflows of Resources

A listing of all deferred resource bases used to develop the Net Position and OPEB Expense is shown below. Deferred Contributions are not shown.

Measurement Date: June 30, 2021

| Deferred Outflow or (Inflow) | | | | | | Balance as of Jun 30, 2021 | Recognition of Deferred Outflow or Deferred (Inflow) in Measurement Period: | | | | | | |
|------------------------------|------------------------|--|-------------------|-----------------|-----------------------|----------------------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------|
| Date Created | Source | Impact on Net OPEB Liability (NOL) | Initial Amount | Period (Yrs) | Annual Recognition | | 2020-21 (FYE 2022) | 2021-22 (FYE 2023) | 2022-23 (FYE 2024) | 2023-24 (FYE 2025) | 2024-25 (FYE 2026) | 2025-26 (FYE 2027) | Thereafter |
| 6/30/2017 | Assumption Changes | Decreased NOL | \$ (994,873) | 7.18 | \$ (138,511) | \$ (302,318) | \$ (138,511) | \$ (138,511) | \$ (138,511) | \$ (25,296) | \$ - | \$ - | \$ - |
| 6/30/2017 | Investment Earnings | Increased NOL | 28,938 | 5.00 | 5,788 | - | 5,786 | - | - | - | - | - | - |
| 6/30/2017 | Plan Experience | Decreased NOL | (1,408,629) | 7.18 | (196,117) | (428,044) | (196,117) | (196,117) | (196,117) | (35,810) | - | - | - |
| 6/30/2018 | Investment Earnings | Increased NOL | 84,440 | 5.00 | 16,888 | 16,888 | 16,888 | 16,888 | - | - | - | - | - |
| 6/30/2019 | Plan Experience | Decreased NOL | (1,357,116) | 6.97 | (194,708) | (772,992) | (194,708) | (194,708) | (194,708) | (194,708) | (188,868) | - | - |
| 6/30/2019 | Assumption Changes | Increased NOL | 205,894 | 6.97 | 29,540 | 117,274 | 29,540 | 29,540 | 29,540 | 29,540 | 28,654 | - | - |
| 6/30/2019 | Investment Earnings | Decreased NOL | (40,545) | 5.00 | (8,109) | (16,218) | (8,109) | (8,109) | (8,109) | - | - | - | - |
| 6/30/2020 | Investment Earnings | Decreased NOL | (5,924) | 5.00 | (1,185) | (3,554) | (1,185) | (1,185) | (1,185) | (1,184) | - | - | - |
| 6/30/2021 | Plan Experience | Decreased NOL | (184,833) | 6.51 | (28,392) | (156,441) | (28,392) | (28,392) | (28,392) | (28,392) | (28,392) | (28,392) | (14,481) |
| 6/30/2021 | Assumption Changes | Increased NOL | 417,022 | 6.51 | 64,059 | 352,963 | 64,059 | 64,059 | 64,059 | 64,059 | 64,059 | 64,059 | 32,668 |
| 6/30/2021 | Investment Earnings | Decreased NOL | (263,622) | 5.00 | (52,724) | (210,898) | (52,724) | (52,724) | (52,724) | (52,724) | (52,726) | - | - |



Accounting Information

(Continued)

Detail of Authority Contributions to the Plan

Authority contributions to the Plan occur as benefits are paid to or on behalf of retirees. Benefit payments may occur in the form of direct payments for premiums (“explicit subsidies”) and/or indirect payments to retirees in the form of higher premiums for active employees (“implicit subsidies”). Note that the implicit subsidy contribution does not represent cash payments to retirees, but rather the reclassification of a portion of active healthcare expense to be recognized as a retiree healthcare cost. For details, see Addendum 1 – Important Background Information.

Benefits and other contributions paid by the Authority during the measurement period are shown below.

| For the Measurement Period, Jul 1, 2020 thru Jun 30, 2021 | CCCTA |
|--|--------------|
| Employer | |
| (a) Contribution To Trust | \$ 219,367 |
| (b) Benefits Paid Directly to Retirees | 239,144 |
| (c) Implicit Subsidy Payment | 87,904 |
| Trust | |
| (d) Benefits Paid Directly to Retirees | - |
| (e) Reimbursements to Employer | - |
| <i>Total Benefits Paid During the MP, (b)+(c)+(d)</i> | 327,048 |
| <i>Employer Contribution During the MP, (a)+(b)+(c)-(e)</i> | 546,415 |

Authority OPEB contributions made after the measurement date but prior to the current fiscal year end to be reported as deferred contributions are shown below.

| For the Fiscal Year, Jul 1, 2021 thru Jun 30, 2022 | CCCTA |
|---|--------------|
| Employer | |
| (f) Contribution To Trust | \$ 176,021 |
| (g) Benefits Paid Directly to Retirees | 290,880 |
| (h) Implicit Subsidy Payment | 107,335 |
| Trust | |
| (i) Benefits Paid Directly to Retirees | - |
| (j) Reimbursements to Employer | - |
| <i>Total Benefits Paid During the Current FY, (g)+(h)+(i)</i> | 398,215 |
| <i>Employer Contribution During the Current FY, (f)+(g)+(h)-(j)</i> | 574,236 |



Accounting Information

(Continued)

Projected Benefit Payments (15-year projection)

The following is an estimate of other post-employment benefits to be paid on behalf of current retirees and current employees expected to retire from the Authority. Expected annual benefits have been projected on the basis of the actuarial assumptions outlined in Section 3.

| Projected Annual Benefit Payments | | | | | | | |
|-----------------------------------|---------------------|--------------------|------------|---------------------|--------------------|------------|------------|
| Fiscal Year Ending June 30 | Explicit Subsidy | | | Implicit Subsidy | | | Total |
| | Current Retirees | Future Retirees | Total | Current Retirees | Future Retirees | Total | |
| 2022 | \$ 290,880 | \$ - | \$ 290,880 | \$ 107,335 | \$ - | \$ 107,335 | \$ 398,215 |
| 2023 | 267,349 | 62,825 | 330,174 | 6,960 | 78,819 | 85,779 | 415,953 |
| 2024 | 260,683 | 89,617 | 350,300 | 7,927 | 119,397 | 127,324 | 477,624 |
| 2025 | 253,645 | 112,444 | 366,089 | 9,016 | 165,233 | 174,249 | 540,338 |
| 2026 | 246,230 | 136,617 | 382,847 | 10,220 | 165,194 | 175,414 | 558,261 |
| 2027 | 238,436 | 158,092 | 396,528 | 11,543 | 155,486 | 167,029 | 563,557 |
| 2028 | 230,267 | 178,269 | 408,536 | - | 174,428 | 174,428 | 582,964 |
| 2029 | 221,724 | 194,376 | 416,100 | - | 178,099 | 178,099 | 594,199 |
| 2030 | 212,812 | 210,093 | 422,905 | - | 172,301 | 172,301 | 595,206 |
| 2031 | 203,545 | 224,890 | 428,435 | - | 169,879 | 169,879 | 598,314 |
| 2032 | 193,934 | 238,655 | 432,589 | - | 182,217 | 182,217 | 614,806 |
| 2033 | 184,318 | 249,714 | 434,032 | - | 178,028 | 178,028 | 612,060 |
| 2034 | 176,090 | 263,656 | 439,746 | - | 202,899 | 202,899 | 642,645 |
| 2035 | 167,682 | 275,782 | 443,464 | - | 206,563 | 206,563 | 650,027 |
| 2036 | 159,148 | 288,306 | 447,454 | - | 205,095 | 205,095 | 652,549 |

The amounts shown in the Explicit Subsidy section of the table reflect the expected payment by the Authority toward retiree medical premiums in each of the years shown. The amounts are shown separately, and in total, for those retired on the valuation date ("current retirees") and those expected to retire after the valuation date ("future retirees").

The amounts shown in the Implicit Subsidy table reflect the expected excess of retiree medical and prescription drug claims over the premiums expected to be charged during the year for retirees' coverage. These amounts are also shown separately and in total for those currently retired on the valuation date and for those expected to retire in the future.

These projections do not include any benefits expected to be paid on behalf of current active employees *prior to* retirement, nor do they include any benefits for potential *future employees* (i.e., those who might be hired in future years).



Accounting Information

(Concluded)

Sample Journal Entries

| OPEB Accounts at Beginning of Fiscal Year | By Source | | Sources Combined | |
|--|--------------|---------------|------------------|---------------|
| | Debit | Credit | Debit | Credit |
| Net OPEB Liability | | 3,025,188 | | 3,025,188 |
| <i>Deferred Outflow:</i> | | | | |
| Assumption Changes | 146,814 | | | |
| Plan Experience | - | | | |
| Investment Experience | 39,562 | | | |
| Contribution Subsequent to MD | 546,415 | | | |
| Deferred Outflows | | | 732,791 | |
| <i>Deferred Inflow:</i> | | | | |
| Assumption Changes | | 440,829 | | |
| Plan Experience | | 1,591,861 | | |
| Investment Experience | | 29,066 | | |
| Deferred Inflows | | | | 2,061,756 |
| Record Benefits Paid to Retirees | Debit | | | Credit |
| Net OPEB Liability | 290,880 | | | 290,880 |
| Cash | | | 290,880 | |
| Record Contributions to the Trust | Debit | | | Credit |
| Net OPEB Liability | 176,021 | | | 176,021 |
| Cash | | | 176,021 | |
| Record Implicit Subsidy Payment | Debit | | | Credit |
| Net OPEB Liability | 107,335 | | | 107,335 |
| Premium Expense | | | 107,335 | |
| Record End of Year Updates to OPEB Accounts | Debit | Credit | Debit | Credit |
| Net OPEB Liability | | 482,307 | | 482,307 |
| <i>Deferred Outflow:</i> | | | | |
| Assumption Changes | 323,423 | | | |
| Plan Experience | | | | |
| Investment Experience | | 22,674 | | |
| Contribution Subsequent to MD | 27,821 | | | |
| Deferred Outflows | | | 328,570 | |
| <i>Deferred Inflow:</i> | | | | |
| Assumption Changes | 138,511 | | | |
| Plan Experience | 234,384 | | | |
| Investment Experience | | 201,604 | | |
| Deferred Inflows | | | 171,291 | |
| OPEB Expense | | 17,554 | | 17,554 |



E. Funding Information

The employer's OPEB funding policy and level of contributions to an irrevocable OPEB trust directly affects the discount rate which is used to calculate the OPEB liability to be reported in the employer's financial statements. Prefunding (setting aside funds to accumulate in an irrevocable OPEB trust) has certain advantages, one of which is the ability to (potentially) use a higher discount rate in the determination of liabilities for GASB 75 reporting purposes. Prefunding also improves the security of benefits for current and potential future recipients and contributes to intergenerational taxpayer equity by better matching the cost of the benefits to the service years in which they are "earned" and which correspond to years in which taxpayers benefit from those services.

Paying Down the UAAL

Once an employer decides to prefund, a decision must be made about how to pay for benefits related to accumulated prior service that have not yet been funded (the UAAL³). This is most often, though not always, handled through structured amortization payments. The period and method chosen for amortizing this unfunded liability can significantly affect the Actuarially Determined Contribution (ADC) or other basis selected for funding the OPEB program.

Much like paying off a mortgage, when the AAL exceeds plan assets, choosing a longer amortization period to pay off the UAAL means smaller payments, but the payments will be required for more years; plan investments will have less time to work toward helping reduce required contribution levels. When the plan is in a surplus position, the reverse is true, and a longer amortization period is usually preferable.

There are several ways the amortization payment can be determined. The most common methods are calculating the amortization payment as a level dollar amount or as a level percentage of payroll. The employer might also choose to apply a shorter period when the UAAL only when it is positive, i.e., when trust assets are lower than the AAL, but opt for a longer period or to exclude amortization of a negative UAAL, when assets exceed the AAL. The entire UAAL may be amortized as one single component or may be broken into multiple components reflecting the timing and source of each change, such as those arising from assumption changes, benefit changes and/or liability or investment experience.

The amortization period(s) should not exceed the number of years which would allow current trust assets plus future contributions and earnings to be sufficient to pay all future benefits and trust expenses each year. Prefunding of OPEB is optional and contributions at any level are permitted. However, if trust sufficiency is not expected, a discount rate other than the assumed trust return will likely be required for accounting purposes.

Funding and Prefunding of the Implicit Subsidy

An implicit subsidy liability is created when retiree medical claims are expected to exceed the premiums charged for retiree coverage. Recognition of the estimated implicit subsidy each year is handled by an accounting entry, reducing the amount paid for active employees and shifting that amount to be treated as a retiree healthcare expense/contribution (see Sample Journal Entries). The implicit subsidy is a true benefit to the retiree but can be difficult to see when medical premiums are set as a flat rate for both actives and pre-Medicare retirees.

³ We use actuarial, rather than accounting, terminology to describe the components used to develop the ADCs.



Funding Information

(Continued)

This might lead some employers to believe the benefit is not real or is merely an accounting construct, and thus to forgo prefunding of retiree implicit benefits.

Consider what would happen if the retiree premiums were based only on expected retiree claims experience. Almost certainly, retiree premiums would increase while premiums for active employees would go down if the active premiums no longer had to help support the higher retiree claims. *Who would pay the increases in retiree premiums?* Current plan documents and bargaining agreements would have to be consulted. Depending on circumstances, the increase in retiree premiums might remain the responsibility of the employer, pass entirely to the retirees, or some blending of the two. The answer would determine whether separate retiree-only premium rates would result in a higher or lower employer OPEB liability. In the current premium structure, with blended active and pre-Medicare retiree premiums, the employer is clearly, though indirectly, paying the implicit retiree cost.

The prefunding decision is complex. OPEB materiality, budgetary concerns, desire to use the full trust rate in developing the liability for GASB 75, and other factors must be weighed by each employer. Since prefunding OPEB benefits is not required, each employer's OPEB prefunding strategy will depend on how they balance these competing perspectives.

Development of the Actuarially Determined Contributions

The Authority has approved development of ADCs based on the following two components, which are then adjusted with interest to each fiscal year end:

- The amounts attributed to service performed in the current fiscal year (the normal cost) and
- Amortization of the unfunded actuarial accrued liability (UAAL) over a closed 30-year period. Amortization payments are determined on a level % of pay basis; 17 years remain for FYE 2023.

Actuarially Determined Contributions, developed as described above for the Authority's fiscal years ending June 30, 2023, and 2024 are shown the exhibit on the next page. These ADCs incorporate both explicit (cash benefit) and implicit subsidy benefit liabilities. Contributions credited toward meeting the ADC will be comprised of:

- 1) direct payments to insurers toward retiree premiums, to the extent not reimbursed to the Authority by the trust; plus
- 2) each year's implicit subsidy payment; and
- 3) contributions to the OPEB trust.

ADCs determined on this basis should provide for trust sufficiency, based on the current plan provisions and census data, provided all assumptions are exactly realized and if the Authority contributes 100% or more of the ADC each year. When an agency commits to funding the trust at or above the ADC, the expected long-term trust return may be used as the discount rate in determining the plan liability for accounting purposes. Trust sufficiency cannot be guaranteed to a certainty, however, because of the non-trivial risk that the assumptions used to project future benefit liabilities may not be realized.



Funding Information

(Continued)

We develop the Actuarially Determined Contributions (ADCs) for fiscal years ending June 30, 2023, and June 30, 2024, from the results of this valuation. The ADC for fiscal year end June 30, 2022, was developed from the prior (2019) valuation and we have included this for reference as well.

| Valuation date | 6/30/2019 | 6/30/2021 | |
|--|----------------|----------------|----------------|
| Discount rate | 5.10% | 4.75% | |
| Number of Covered Employees | | | |
| Actives | 212 | 199 | |
| Retirees | 54 | 64 | |
| Total Participants | 266 | 263 | |
| For fiscal year ending | 6/30/2022 | 6/30/2023 | 6/30/2024 |
| Actuarial Present Value of Projected Benefits | \$ 9,841,828 | \$ 10,729,440 | \$ 10,813,257 |
| Actuarial Accrued Liability (AAL) | | | |
| Actives | 5,571,883 | 5,547,129 | 6,004,577 |
| Retirees | 2,209,833 | 2,911,053 | 2,768,504 |
| Total AAL | 7,781,716 | 8,458,182 | 8,773,081 |
| Actuarial Value of Assets | 4,809,768 | 5,538,522 | 5,920,043 |
| Unfunded AAL (UAAL) | 2,971,948 | 2,919,660 | 2,853,038 |
| UAAL Amortization method | Level % of Pay | Level % of Pay | Level % of Pay |
| Remaining amortization period (years) | 18 | 17 | 16 |
| Amortization Factor | 15.2456 | 14.9071 | 14.1434 |
| Actuarially Determined Contribution (ADC) | | | |
| Normal Cost | 339,484 | \$ 323,596 | \$ 333,304 |
| Amortization of UAAL | 194,938 | 195,857 | 201,723 |
| Interest to fiscal year end | 27,256 | 12,194 | 12,559 |
| Total ADC | 561,678 | 531,647 | 547,586 |

As described on the prior page, OPEB funding consists of 3 different sources. Actual contributions made for fiscal year end 2022 as reported to us are shown below. The chart estimates how these 3 contribution sources would apply toward satisfying the ADC for fiscal year ends 2023 and 2024.

| | | | |
|--|----------------|-------------------|-------------------|
| 1 Implicit subsidy contribution | 107,335 | \$ 85,779 | \$ 127,324 |
| Additional payments needed to meet ADC | 454,343 | 445,868 | 420,262 |
| 2 <i>Estimated agency paid premiums for retirees</i> | 290,880 | 330,174 | 350,300 |
| 3 <i>Estimated agency contribution to OPEB trust</i> | 176,021 | 115,694 | 69,962 |
| Total Expected Employer Contributions (1+2+3) | 574,236 | \$ 531,647 | \$ 547,586 |

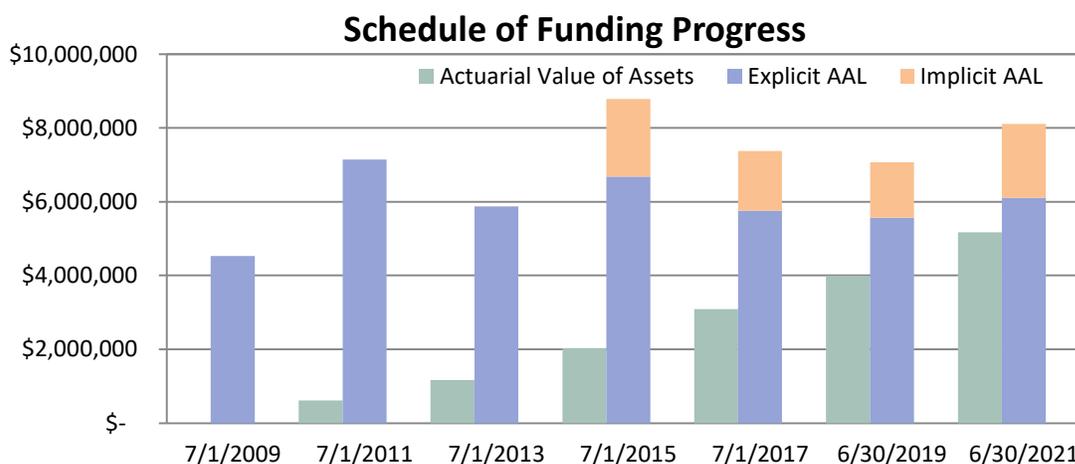
If retiree benefit payments for those years are lower than our projection, the contribution to the trust should be increased to balance so that total contributions equal or exceed the ADC each year.



Funding Information**(Concluded)**

In this section, we provide a review of key components of valuation results from 2009 through 2021.

| Schedule of Funding Progress | | | | | | | |
|------------------------------|-------------------------------|---------------------------------|--|--------------------|---------------------|---|---------------|
| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (b) | Unfunded Actuarial Accrued Liability (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a Percentage of Covered Payroll ((b-a)/c) | Discount Rate |
| 7/1/2009 | \$ - | \$ 4,534,658 | \$ 4,534,658 | 0.0% | \$ 15,219,990 | 29.8% | 5.50% |
| 7/1/2011 | \$ 613,708 | \$ 7,145,685 | \$ 6,531,977 | 8.6% | \$ 13,510,453 | 48.3% | 5.50% |
| 7/1/2013 | \$ 1,165,830 | \$ 5,875,942 | \$ 4,710,112 | 19.8% | \$ 12,017,071 | 39.2% | 5.50% |
| 7/1/2015 | \$ 2,032,180 | \$ 8,785,647 | \$ 6,753,467 | 23.1% | \$ 11,784,880 | 57.3% | 5.10% |
| 7/1/2017 | \$ 3,084,827 | \$ 7,373,838 | \$ 4,289,011 | 41.8% | \$ 12,531,658 | 34.2% | 5.10% |
| 6/30/2019 | \$ 3,990,303 | \$ 7,072,609 | \$ 3,082,306 | 56.4% | \$ 14,836,604 | 20.8% | 5.10% |
| 6/30/2021 | \$ 5,174,920 | \$ 8,108,180 | \$ 2,933,260 | 63.8% | \$ 14,326,765 | 20.5% | 4.75% |



Significant changes during this period include:

- **July 1, 2015:** Discount rate decreased slightly; first time recognition of implicit subsidy liability and potential excise tax liability under the Affordable Care Act; introduced mortality rate improvement.
- **July 1, 2017:** Some decreases in assumed rates of participation for future retirees and their spouses; increase in future healthcare trend; experience gain, largely from lower-than-expected new retiree/spouse participation and medical premium increases.
- **June 30, 2019:** Updated demographic assumptions; elimination of liability for repealed excise tax 2019 repeal; significantly lower medical premiums than projected due to consolidated rate regions.
- **June 30, 2021:** Reflected lower future expected trust returns, though prior year returns exceeded expected; reflected post-65 liability for non-Medicare Advantage plans and for 2 members not expected to be covered by Medicare; adjusted assumed future rates of retiree and spouse coverage elections.



F. Certification

The primary purposes of this report are: (1) to provide actuarial information of the other postemployment benefits (OPEB) provided by the Central Contra Costa Transit Authority (the Authority) in compliance with Statement 75 of the Governmental Accounting Standards Board (GASB 75); and (2) to provide Actuarially Determined Contributions for prefunding of this program in conformity with the District's OPEB funding policy. The Authority is not required to contribute the ADC shown in this report and we make no representation that it will, in fact, fund the OPEB trust at any particular level).

In preparing this report we relied without audit on information provided by the Authority. This information includes, but is not limited to, plan provisions, census data, and financial information. We performed a limited review of this data and found the information to be reasonably consistent. The accuracy of this report is dependent on this information and if any of the information we relied on is incomplete or inaccurate, then the results reported herein will be different from any report relying on more accurate information.

We consider the actuarial assumptions and methods used in this report to be individually reasonable under the requirements imposed by GASB 75 and taking into consideration reasonable expectations of plan experience. The results provide an estimate of the plan's financial condition at one point in time. Future actuarial results may be significantly different due to a variety of reasons including, but not limited to, demographic and economic assumptions differing from future plan experience, changes in plan provisions, changes in applicable law, or changes in the value of plan benefits relative to other alternatives available to plan members.

Alternative assumptions may also be reasonable; however, demonstrating the range of potential plan results based on alternative assumptions was beyond the scope of our assignment except to the limited extent required by GASB 75 and in accordance with the Authority's stated OPEB funding policy. Results for accounting purposes may be materially different than results obtained for other purposes such as plan termination, liability settlement, or underlying economic value of the promises made by the plan.

This report is prepared solely for the use and benefit of the Authority and may not be provided to third parties without prior written consent of MacLeod Watts. Exceptions are: the Authority may provide copies of this report to their professional accounting and legal advisors who are subject to a duty of confidentiality, and the Authority may provide this work to any party if required by law or court order. No part of this report should be used as the basis for any representations or warranties in any contract or agreement without the written consent of MacLeod Watts.

The undersigned are unaware of any relationship that might impair the objectivity of this work. Nothing within this report is intended to be a substitute for qualified legal or accounting counsel. The signing actuary is a member of the American Academy of Actuaries and meets the qualification standards for rendering this opinion.

Signed: October 7, 2022

Catherine L. MacLeod, FSA, FCA, EA, MAAA

J. Kevin Watts, FSA, FCA, MAAA



G. Supporting Information**Section 1 - Summary of Employee Data**

Active employees: The Authority reported 199 active members in the data provided to us for the June 2021 valuation. Of these, 169 were currently enrolled in the medical program, with 30 waiving coverage.

| Distribution of Benefits-Eligible Active Employees | | | | | | | | |
|--|------------------|------------|------------|------------|------------|------------|-------------|-------------|
| Current Age | Years of Service | | | | | | Total | Percent |
| | Under 1 | 1 to 4 | 5 to 9 | 10 to 14 | 15 to 19 | 20 & Up | | |
| Under 25 | | | | | | | 0 | 0% |
| 25 to 29 | 1 | 3 | | | | | 4 | 2% |
| 30 to 34 | 1 | 7 | 5 | | | | 13 | 7% |
| 35 to 39 | | 1 | 6 | 3 | | | 10 | 5% |
| 40 to 44 | | 3 | 9 | 4 | 6 | 1 | 23 | 12% |
| 45 to 49 | | 6 | 2 | 4 | 4 | 5 | 21 | 11% |
| 50 to 54 | | 10 | 4 | 6 | 6 | 9 | 35 | 18% |
| 55 to 59 | | 3 | 4 | 2 | 5 | 17 | 31 | 16% |
| 60 to 64 | | 11 | 9 | 5 | 5 | 13 | 43 | 22% |
| 65 to 69 | | 2 | 2 | | 3 | 6 | 13 | 7% |
| 70 & Up | | | | | | 6 | 6 | 3% |
| Total | 2 | 46 | 41 | 24 | 29 | 57 | 199 | 100% |
| Percent | 1% | 23% | 21% | 12% | 15% | 29% | 100% | |

| | | |
|----------------------------------|-----------|-----------|
| Valuation | June 2019 | June 2021 |
| Average Attained Age for Actives | 52.4 | 52.9 |
| Average Years of Service | 12.9 | 14.0 |

Retirees: There are also 64 retirees receiving benefits under this program on the valuation date. Their current ages are summarized in the chart at right, as well as the average age at retirement.

| Retirees by Age | | |
|---------------------|-----------|-------------|
| Current Age | Number | Percent |
| Below 50 | 0 | 0% |
| 50 to 54 | 0 | 0% |
| 55 to 59 | 0 | 0% |
| 60 to 64 | 1 | 2% |
| 65 to 69 | 20 | 31% |
| 70 to 74 | 21 | 33% |
| 75 to 79 | 13 | 20% |
| 80 & up | 9 | 14% |
| Total | 64 | 100% |
| Average Age: | | |
| On 6/30/2021 | 73.7 | |
| At retirement | 63.9 | |

Summary of Plan Member Counts: The numbers of those members currently or potentially eligible to receive benefits under the OPEB plan are required to be reported in the notes to the financial statements.

| Summary of Plan Member Counts | |
|--|------|
| Number of active plan members | 199 |
| Number of inactive plan members currently receiving benefits | 64 |
| Number of inactive plan members entitled to but not receiving benefits | 110* |

* Retirees eligible to return to the Authority for PEMHCA coverage



Supporting Information

(Continued)

Section 1 - Summary of Employee Data

(continued)

The counts of plan members for each of the three primary bargaining groups are shown below:

| Participants By Group | | | | |
|-----------------------|------------|----------|-----------|------------|
| Group | Active | Retired | | Total |
| | | Under 65 | Over 65 | |
| Administrative | 46 | - | 28 | 74 |
| ATU | 145 | 1 | 33 | 179 |
| Teamsters | 8 | - | 2 | 10 |
| Total | 199 | 1 | 63 | 263 |

The chart below reconciles the number of actives and retirees included in the July 1, 2019, valuation of the Authority plan with those included in the June 30, 2021, valuation:

| Reconciliation of Authority Plan Members Between Valuation Dates | | | | | |
|--|-----------------|-----------------|------------------|---------------------------|------------|
| Status | Covered Actives | Waiving Actives | Covered Retirees | Covered Surviving Spouses | Total |
| Number reported as of June 30, 2019 | 172 | 40 | 51 | 3 | 266 |
| New employees | 18 | 3 | | | 21 |
| Separated employees | (11) | (6) | | | (17) |
| New retiree, elected coverage | (10) | (1) | 11 | | 0 |
| New retiree, waiving coverage | (4) | (4) | | | (8) |
| Previously covered, now waiving | (2) | 2 | (1) | | (1) |
| Previously waiving, now covered | 4 | (4) | 1 | 1 | 2 |
| Previously ineligible, now covered | 2 | | | | 2 |
| Deceased | | | (5) | 3 | (2) |
| Number reported as of June 30, 2021 | 169 | 30 | 57 | 7 | 263 |

The total plan population was fairly stable in the two-year period between valuations. The number of active plan members, both covered and waiving, declined by 13, from 212 to 199, representing a 6% decrease in active employees included in the valuation. The number of covered retirees and spouses increased by 10 (about 19%), from 54 to 64 covered members.

Of 19 new retirements reported as occurring between July 1, 2019, and June 30, 2021, 11 elected to continue medical coverage through the Authority; the other 8 declined coverage, though they retain the right to re-enroll in the future. We reviewed the percentages of retirees at various age and group affiliation and, as expected, there were some differences in the percentages retirees electing coverage in the different bargaining groups. There were also differences in the percentages of new retirees electing coverage over and under 65.

| Recent Retiree Election by Group | | | | |
|----------------------------------|----------|----------|-----------|----------|
| Group | Pre-65 | | Post-65 | |
| | Elected | Waived | Elected | Waived |
| Administrative | 1 | 1 | 3 | - |
| ATU | - | 3 | 6 | 4 |
| Teamsters | - | - | 1 | - |
| Total | 1 | 4 | 10 | 4 |



Supporting Information

(Continued)

Section 2 - Summary of Retiree Benefit Provisions

OPEB provided: The Authority has indicated that the only OPEB provided is medical coverage.

Access to coverage: Medical coverage is currently provided through CalPERS as permitted under the Public Employees' Medical and Hospital Care Act (PEMHCA). This coverage requires the employee to satisfy the requirements for retirement under CalPERS: either (a) attainment of age 50 (if Classic) or 52 (if PEPR) with 5 years of State or public agency service or (b) an approved disability retirement.

The employee must begin his or her retirement (pension) benefit within 120 days of terminating employment with the Authority to be eligible to continue medical coverage through the Authority and be entitled to the benefits described below. In other words, it is the timing of initiating CalPERS pension benefits and not timing of enrollment in the medical program which determines whether or not the retiree qualifies for lifetime medical coverage and any benefits defined in the PEMHCA resolution.

Once eligible, if an eligible employee is not already enrolled in the medical plan, he or she may enroll within 60 days of retirement, during any future open enrollment period or with a qualifying life event. Coverage may be continued at the retiree's option for his or her lifetime. A surviving spouse and other eligible dependents may also continue coverage

Benefits provided: As a condition of participation in the CalPERS medical program, the Authority is obligated to contribute toward the cost of retiree medical coverage for the retiree's lifetime or until coverage is discontinued. The Authority executed three resolutions, at differing dates, for the Administrative, Amalgamated Transit Union (ATU) and Teamster employee groups, respectively. Each of these resolutions was executed on an "unequal" contribution basis for retirees relative to the level of the Authority's contribution toward the cost of medical plan premiums.

- Under the unequal resolution, the employer's contribution toward *retiree* medical benefits is determined as follows: (1) 5% *multiplied by* (2) the number of prior years the agency group has been contracted with PEMHCA *multiplied by* (3) the contribution the employer makes toward active employee health benefits for that group.
- Note, however, that the monthly benefit may not be less than the required PEMHCA minimum employer contribution (MEC). The MEC was \$143 per month in 2021 and increased to \$149 per month in 2022. If the current benefits are not increased in the future, eventually the MEC will overtake the fixed subsidies and become the operative benefit. In Appendix 1, we have provided a projection of the years in which this is expected to occur.

The Administrative and Teamster groups have each participated in the CalPERS medical program under the unequal contribution resolutions for more than 20 years. Accordingly, contribution levels for these retirees are now equal to the applicable subsidy amounts stated in the PEMHCA resolutions for active employees. The first two charts at the top of the following page describe the subsidies provided to Administrative and Teamster actives and retirees, varying by group and CalPERS medical plan.

Continued on the following page



Summary of Retiree Benefit Provisions

(Continued)

| Administrative Group | | | |
|--|-----------|-----------|---------------|
| Active and Retiree Monthly Subsidies by Plan | | | |
| Plan | Self | Self + 1 | Self + Family |
| Anthem HMO Traditional | \$ 494.86 | \$ 989.71 | \$ 1,286.63 |
| Anthem HMO Select | 270.71 | 541.42 | 703.85 |
| Blue Shield Access | 329.08 | 658.10 | 855.60 |
| Blue Shield Access Advantage | 329.08 | 658.10 | 855.60 |
| Kaiser | 303.56 | 607.12 | 789.26 |
| PERS Platinum | 392.42 | 784.84 | 1,020.29 |
| PERS Gold | 270.71 | 541.42 | 703.85 |
| United Healthcare | 303.56 | 607.12 | 789.26 |
| Western Health Advantage HMO | 303.56 | 607.12 | 789.26 |

| Teamsters | | | |
|--|-----------|-----------|---------------|
| Active and Retiree Monthly Subsidies by Plan | | | |
| Plan | Self | Self + 1 | Self + Family |
| Anthem HMO Traditional | \$ 374.92 | \$ 749.83 | \$ 974.78 |
| Anthem HMO Select | 226.58 | 453.16 | 589.11 |
| Blue Shield Access | 280.29 | 560.57 | 728.74 |
| Blue Shield Access Advantage | 280.29 | 560.57 | 728.74 |
| Kaiser | 254.15 | 508.30 | 660.79 |
| PERS Platinum | 308.08 | 616.55 | 801.01 |
| PERS Gold | 226.58 | 453.16 | 589.11 |
| United Healthcare | 254.15 | 508.30 | 660.79 |
| Western Health Advantage HMO | 254.15 | 508.30 | 660.79 |

ATU's unequal resolution was executed in 2002; therefore, as of 2021 ATU has completed the last of the 20 year unequal phase-in period as of the valuation date. Thus, the Authority contributes the same amounts for ATU retirees as is contributed for active ATU employees. The subsidies for ATU members, varying by plan are shown below:

| Amalgamated Transit Union (ATU) | | | |
|--|-----------|-----------|---------------|
| Active and Retiree Monthly Subsidies by Plan | | | |
| Plan | Self | Self + 1 | Self + Family |
| Anthem HMO Traditional | \$ 374.92 | \$ 749.83 | \$ 974.78 |
| Anthem HMO Select | 233.59 | 467.18 | 607.34 |
| Blue Shield Access | 266.47 | 532.93 | 692.81 |
| Health Net | 139.00 | 139.00 | 139.00 |
| Kaiser | 235.34 | 470.67 | 611.87 |
| PERS Care | 308.08 | 616.16 | 801.01 |
| PERS Choice | 233.59 | 467.18 | 607.34 |
| United Healthcare | 235.34 | 470.67 | 611.87 |



Summary of Retiree Benefit Provisions

(Concluded)

Current premium rates: The 2022 CalPERS monthly medical plan rates in the Region 1 rate group are shown in the table below. If different rates apply where the member resides outside of this area, those rates are reflected in the valuation, but not listed here. The CalPERS administration fee is assumed to be expensed each year and has not been projected as an OPEB liability in this valuation.

| Region 1 2022 Health Plan Rates | | | | | | |
|---------------------------------|------------------------------|-------------|-------------|----------------------------|-----------|------------|
| Plan | Actives and Pre-Med Retirees | | | Medicare Eligible Retirees | | |
| | Ee Only | Ee & 1 | Ee & 2+ | Ee Only | Ee & 1 | Ee & 2+ |
| Anthem EPO Del Norte | \$ 1,057.01 | \$ 2,114.02 | \$ 2,748.23 | \$ 381.94 | \$ 763.88 | \$1,398.09 |
| Anthem Select HMO | 1,015.81 | 2,031.62 | 2,641.11 | 360.19 | 720.38 | 1,329.87 |
| Anthem Traditional HMO | 1,304.00 | 2,608.00 | 3,390.40 | 360.19 | 720.38 | 1,502.78 |
| Health Net SmartCare | 1,153.00 | 2,306.00 | 2,997.80 | <i>Not Available</i> | | |
| Kaiser HMO | 857.06 | 1,714.12 | 2,228.36 | 302.53 | 605.06 | 1,119.30 |
| PERS Platinum PPO | 1,057.01 | 2,114.02 | 2,748.23 | 381.94 | 763.88 | 1,398.09 |
| PERS Gold PPO | 701.23 | 1,402.46 | 1,823.20 | 377.41 | 754.82 | 1,175.56 |
| UHC Alliance HMO* | 1,020.28 | 2,040.56 | 2,652.73 | 347.21 | 694.42 | 1,306.59 |

*Medicare rates shown are for UHC Medicare Advantage Edge



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

The ultimate real cost of an employee benefit plan is the value of all benefits and other expenses of the plan over its lifetime. These payments depend only on the terms of the plan and the administrative arrangements adopted. Actuarial assumptions are used to estimate the cost of these benefits; the funding method spreads the expected costs on a level basis over the life of the plan.

Important Dates

| | |
|--------------------------|---|
| Valuation Date | June 30, 2021 |
| Fiscal Year End | June 30, 2022 |
| GASB 75 Measurement Date | June 30, 2021 (last day of the prior fiscal year) |

Valuation Methods

| | |
|---|--|
| Funding Method | Entry Age Normal Cost, level percent of pay |
| Asset Valuation Method | Market value of assets |
| Participants Valued | Only current active employees and retired participants and covered dependents are valued. No future entrants are considered in this valuation. |
| Development of Age-related Medical Premiums | <p>Actual premium rates for retirees and their spouses were adjusted to an age-related basis by applying medical claim cost factors developed from the data presented in the report, "Health Care Costs – From Birth to Death", sponsored by the Society of Actuaries. A description of the use of claims cost curves can be found in MacLeod Watts's Age Rating Methodology (Addendum 2 to this report).</p> <p>Pre-Medicare retiree premiums are blended with premiums for active members. Medicare-eligible retirees are covered by plans which are rated solely on the experience of Medicare retirees with no subsidy by active employee premiums.</p> <p>Monthly baseline premium costs were set equal to the active single premiums shown in the chart in Section 2. Representative claims costs derived from the dataset provided by CalPERS are shown in the chart on the following page. Age-based claims were applied (a) for all retirees not yet eligible for Medicare and (b) for Medicare retirees receiving benefits in excess of the PEMHCA minimum and covered by Medicare Supplement plans.</p> |



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

Development of Age-related
 Medical Premiums (continued)

| Expected Monthly Claims by Medical Plan for Selected Ages | | | | | | | | | | | | | |
|---|------------------------|------------------------------|----------|----------|----------|----------|--|-----|-----|-----|-----|-----|-----|
| Region | Medical Plan | Non-Medicare Male Retirees | | | | | Medicare Male Retirees | | | | | | |
| | | 50 | 53 | 56 | 59 | 62 | 65 | 70 | 75 | 80 | 85 | 90 | 95 |
| Region 1 | Anthem EPO Del Norte | \$ 1,028 | \$ 1,212 | \$ 1,408 | \$ 1,613 | \$ 1,834 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | Anthem Select HMO | 1,026 | 1,210 | 1,406 | 1,611 | 1,831 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | Anthem Traditional HMO | 1,146 | 1,352 | 1,570 | 1,800 | 2,046 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | Health Net SmartCare | 1,015 | 1,197 | 1,390 | 1,593 | 1,811 | <i>Plan not available to Medicare retirees</i> | | | | | | |
| | Kaiser HMO | 873 | 1,030 | 1,196 | 1,371 | 1,558 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | PERS Gold PPO | 686 | 808 | 939 | 1,076 | 1,223 | 300 | 336 | 365 | 382 | 377 | 360 | 357 |
| | PERS Platinum PPO | 705 | 832 | 966 | 1,107 | 1,259 | 303 | 340 | 369 | 387 | 382 | 365 | 362 |
| | UHC Alliance HMO | 1,016 | 1,198 | 1,392 | 1,595 | 1,814 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| Out of State | Kaiser HMO | \$ 757 | \$ 892 | \$ 1,037 | \$ 1,188 | \$ 1,351 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | PERS Platinum | 634 | 748 | 869 | 996 | 1,132 | 307 | 344 | 374 | 392 | 386 | 369 | 366 |
| | PORAC | 629 | 742 | 862 | 988 | 1,123 | 392 | 440 | 478 | 500 | 494 | 472 | 468 |
| Region | Medical Plan | Non-Medicare Female Retirees | | | | | Medicare Female Retirees | | | | | | |
| | | 50 | 53 | 56 | 59 | 62 | 65 | 70 | 75 | 80 | 85 | 90 | 95 |
| Region 1 | Anthem EPO Del Norte | \$ 1,274 | \$ 1,399 | \$ 1,505 | \$ 1,626 | \$ 1,793 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | Anthem Select HMO | 1,272 | 1,397 | 1,503 | 1,624 | 1,790 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | Anthem Traditional HMO | 1,421 | 1,560 | 1,679 | 1,814 | 2,000 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | Health Net SmartCare | 1,258 | 1,381 | 1,486 | 1,606 | 1,770 | <i>Plan not available to Medicare retirees</i> | | | | | | |
| | Kaiser HMO | 1,082 | 1,189 | 1,279 | 1,382 | 1,523 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | PERS Gold PPO | 850 | 933 | 1,004 | 1,085 | 1,196 | 287 | 324 | 351 | 367 | 370 | 363 | 357 |
| | PERS Platinum PPO | 874 | 960 | 1,033 | 1,116 | 1,230 | 291 | 329 | 356 | 372 | 375 | 367 | 361 |
| | UHC Alliance HMO | 1,259 | 1,383 | 1,488 | 1,608 | 1,773 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| Out of State | Kaiser HMO | \$ 938 | \$ 1,030 | \$ 1,108 | \$ 1,198 | \$ 1,320 | <i>Claims not developed for Medicare Advantage plans</i> | | | | | | |
| | PERS Platinum | 786 | 863 | 929 | 1,004 | 1,106 | 294 | 333 | 360 | 376 | 380 | 372 | 366 |
| | PORAC | 780 | 856 | 922 | 996 | 1,098 | 376 | 425 | 460 | 481 | 485 | 475 | 467 |



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

Economic Assumptions

| | |
|----------------------------|---|
| Long Term Return on Assets | 4.75% as of June 30, 2021, and 5.10% as of June 30, 2020 |
| Discount Rate for Funding | 4.75% as of June 30, 2021, and 5.10% as of June 30, 2020 |
| General Inflation Rate | 2.5% per year |
| Salary Increase | 3.0% per year; since benefits do not depend on salary, this is used to allocate the cost of benefits between service years. |
| Healthcare Trend | Medical plan premiums and claims costs by age are assumed to increase once each year. Increases over the prior year's levels were derived using the Getzen model and are assumed to be effective on the dates shown in the chart below. |

| Effective January 1 | Premium Increase | Effective January 1 | Premium Increase |
|---------------------|------------------|---------------------|------------------|
| 2022 | Actual | 2044-2049 | 4.7% |
| 2023 | 5.8% | 2050-2059 | 4.6% |
| 2024 | 5.6% | 2060-2066 | 4.5% |
| 2025 | 5.4% | 2067-2068 | 4.4% |
| 2026-2027 | 5.2% | 2069-2070 | 4.3% |
| 2028-2029 | 5.1% | 2071 | 4.2% |
| 2030-2038 | 5.0% | 2072-2073 | 4.1% |
| 2039 | 4.9% | 2074-2075 | 4.0% |
| 2040-2043 | 4.8% | 2076 & later | 3.9% |

The healthcare trend shown above was developed using the Getzen Model 2022_b published by the Society of Actuaries using the following settings: CPI 2.5%; Real GDP Growth 1.4%; Excess Medical Growth 1.0%; Expected Health Share of GDP in 2028 20.3%; Resistance Point 20%; Year after which medical growth is limited to growth in GDP 2075.

The PEMHCA minimum employer contribution is assumed to increase by 4.5%

| | |
|-----------------------|--|
| Employer Cost Sharing | We have assumed no increase in the fixed dollar amounts contributed by the Authority for active employees. |
| Medicare Eligibility | All individuals known to have paid into Medicare while actively employee with the Authority are assumed to be eligible for Medicare Parts A and B at age 65. Employees confirmed not to be paying into Medicare are assumed to have a 50% of becoming eligible for Medicare Parts A and B at age 65. |



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions**Participant Election Assumptions**

Retiree Participation Rates

Active employees: The following chart shows the percent of current active employees are assumed to elect medical coverage in retirement:

| Percent of Current Active Employees Assumed to Elect Medical Coverage in Retirement | | | | |
|--|-------------------|--|---------------------------------------|--------------------------|
| Group | Age at Retirement | With Medical Coverage and Retiring in FY 21/22 | Decrease in Percent Electing Coverage | Minimum Percent Electing |
| Admin | Under 65 | 90% | 1.5% | 50% |
| Admin | 65 or older | 100% | 1.5% | 75% |
| ATU | Under 65 | 50% | 1.5% | 45% |
| ATU | 65 or older | 60% | n/a | 60% |
| Teamster | Under 65 | 60% | 1.5% | 45% |
| Teamster | 65 or older | 80% | 1.5% | 60% |

The applicable percentages above are multiplied by 50% for those employees not currently enrolled in medical coverage through the Authority.

Retired participants: Existing medical plan elections are assumed to be continued until the retiree's death.

Spouse Coverage

Active employees: 20% are assumed to be married and elect spouse coverage in retirement prior to age 65 while 45% are assumed to elect spouse coverage after the age 65. Surviving spouses are assumed to retain coverage until their death. Husbands are assumed to be 3 years older than their wives.

Retired participants: Existing elections for spouse coverage are assumed to be continued until the spouse's death. Actual spouse ages are used, where known; if not, husbands are assumed to be 3 years older than their wives.

Spouse gender is assumed to be the opposite of the employee.

Dependent Coverage

Active employees: 30% are assumed to cover eligible dependents other than a spouse at retirement; eligibility for coverage for the youngest dependent is assumed to end at the retiree's age 62.

Retired participants covering dependent children are assumed to end such coverage when the youngest currently covered dependent reaches age 26.



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

Demographic Assumptions

Demographic actuarial assumptions used in this valuation are based on the 2017 experience study of the California Public Employees Retirement System using data from 1997 to 2015, except for a different basis used to project future mortality improvements. Rates for selected age and service are shown below and on the following pages. The representative mortality rates were those published by CalPERS adjusted to back out 15 years of Scale MP 2016 to central year 2015.

Mortality Before Retirement

| CalPERS Public Agency Miscellaneous Non- Industrial Deaths | | |
|--|---------|---------|
| Age | Male | Female |
| 15 | 0.00019 | 0.00004 |
| 20 | 0.00027 | 0.00008 |
| 30 | 0.00044 | 0.00018 |
| 40 | 0.00070 | 0.00040 |
| 50 | 0.00135 | 0.00090 |
| 60 | 0.00288 | 0.00182 |
| 70 | 0.00693 | 0.00438 |
| 80 | 0.01909 | 0.01080 |

Mortality After Retirement
 (before improvement applied)

Healthy Lives

| CalPERS Public Agency Miscellaneous, Police & Fire Post Retirement Mortality | | |
|---|---------|---------|
| Age | Male | Female |
| 40 | 0.00070 | 0.00040 |
| 50 | 0.00431 | 0.00390 |
| 60 | 0.00758 | 0.00524 |
| 70 | 0.01490 | 0.01044 |
| 80 | 0.04577 | 0.03459 |
| 90 | 0.14801 | 0.11315 |
| 100 | 0.35053 | 0.30412 |
| 110 | 1.00000 | 1.00000 |

Disabled Miscellaneous

| CalPERS Public Agency Disabled Miscellaneous Post-Retirement Mortality | | |
|--|---------|---------|
| Age | Male | Female |
| 20 | 0.00027 | 0.00008 |
| 30 | 0.00044 | 0.00018 |
| 40 | 0.00070 | 0.00040 |
| 50 | 0.01371 | 0.01221 |
| 60 | 0.02447 | 0.01545 |
| 70 | 0.03737 | 0.02462 |
| 80 | 0.07218 | 0.05338 |
| 90 | 0.16585 | 0.14826 |

Mortality Improvement

MacLeod Watts Scale 2022 applied generationally from 2015
 (see Addendum 3)



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

Termination Rates

Each rate in this table reflects the probability that an employee with that age and service will end its employment with the agency in the next 12 months for reasons other than retirement or death.

| Miscellaneous Employees: Sum of Vested Terminated & Refund Rates From CalPERS Experience Study Report Issued December 2017 | | | | | | |
|---|------------------|--------|--------|--------|--------|--------|
| Attained Age | Years of Service | | | | | |
| | 0 | 3 | 5 | 10 | 15 | 20 |
| 15 | 0.1812 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 20 | 0.1742 | 0.1193 | 0.0654 | 0.0000 | 0.0000 | 0.0000 |
| 25 | 0.1674 | 0.1125 | 0.0634 | 0.0433 | 0.0000 | 0.0000 |
| 30 | 0.1606 | 0.1055 | 0.0615 | 0.0416 | 0.0262 | 0.0000 |
| 35 | 0.1537 | 0.0987 | 0.0567 | 0.0399 | 0.0252 | 0.0184 |
| 40 | 0.1468 | 0.0919 | 0.0519 | 0.0375 | 0.0243 | 0.0176 |
| 45 | 0.1400 | 0.0849 | 0.0480 | 0.0351 | 0.0216 | 0.0168 |

Service Retirement Rates

The following miscellaneous retirement formulas apply:

- If hired prior to 1/1/2013 or with prior PERS service: 2% @ 60
- If hired on or after 1/1/2013, PEPR: 2% @ 62

Sample rates of assumed future retirements applicable to each of these retirement benefit formulas are shown in tables below. Each rate reflects the probability that an employee with that age and service will take a service retirement in the next 12 months.

Sample rates of assumed future retirements applicable to each of these retirement benefit formulas are shown in tables on the following page. Each rate reflects the probability that an employee with that age and service will take a service retirement in the next 12 months.

| Miscellaneous Employees: 2% at 60 formula | | | | | | |
|---|------------------|--------|--------|--------|--------|--------|
| From CalPERS Experience Study Report Issued December 2017 | | | | | | |
| Current Age | Years of Service | | | | | |
| | 5 | 10 | 15 | 20 | 25 | 30 |
| 50 | 0.0200 | 0.0200 | 0.0200 | 0.0200 | 0.0200 | 0.1500 |
| 55 | 0.0190 | 0.0260 | 0.0330 | 0.0920 | 0.1360 | 0.1460 |
| 60 | 0.0700 | 0.0740 | 0.0890 | 0.1130 | 0.1370 | 0.1610 |
| 65 | 0.1400 | 0.1780 | 0.2150 | 0.2640 | 0.3210 | 0.3770 |
| 70 | 0.1400 | 0.1780 | 0.2150 | 0.2640 | 0.3210 | 0.3770 |
| 75 & over | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| Miscellaneous "PEPR" Employees: 2% at 62 formula | | | | | | |
|---|------------------|--------|--------|--------|--------|--------|
| From CalPERS Experience Study Report Issued December 2017 | | | | | | |
| Current Age | Years of Service | | | | | |
| | 5 | 10 | 15 | 20 | 25 | 30 |
| 50 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 55 | 0.0100 | 0.0190 | 0.0280 | 0.0360 | 0.0610 | 0.0960 |
| 60 | 0.0310 | 0.0510 | 0.0710 | 0.0910 | 0.1110 | 0.1380 |
| 65 | 0.1080 | 0.1410 | 0.1730 | 0.2060 | 0.2390 | 0.3000 |
| 70 | 0.1200 | 0.1560 | 0.1930 | 0.2290 | 0.2650 | 0.3330 |
| 75 & over | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

Disability Retirement Rates

| CalPERS Public Agency Miscellaneous Disability From Dec 2017 Experience Study Report | | |
|---|---------|---------|
| Age | Male | Female |
| 20 | 0.00017 | 0.00010 |
| 25 | 0.00017 | 0.00010 |
| 30 | 0.00019 | 0.00024 |
| 35 | 0.00039 | 0.00071 |
| 40 | 0.00102 | 0.00135 |
| 45 | 0.00151 | 0.00188 |
| 50 | 0.00158 | 0.00199 |
| 55 | 0.00158 | 0.00149 |
| 60 | 0.00153 | 0.00105 |

Software and Models Used in the Valuation

ProVal - MacLeod Watts utilizes ProVal, a licensed actuarial valuation software product from Winklevoss Technologies (WinTech) to project future retiree benefit payments and develop the OPEB liabilities presented in this report. ProVal is widely used by the actuarial community. We review results at the plan level and for individual sample lives and find them to be reasonable and consistent with the results we expect. We are not aware of any material inconsistencies or limitations in the software that would affect this actuarial valuation.

Age-based premiums model – developed internally and reviewed by an external consultant at the time it was developed. See discussion on Development of Age-Related Medical Premiums and Addendum 3.

Getzen model – published by the Society of Actuaries; used to derive medical trend assumptions described earlier in this section.

Changes in assumptions or methods since the prior Measurement Date

| | |
|---|--|
| Trust rate of return and discount rate | Decreased from 5.10% to 4.75%, reflecting updated long-term rates of return provided by PARS in April 2022 |
| Mortality Improvement | The mortality improvement scale was updated from MacLeod Watts Scale 2018 to MacLeod Watts Scale 2022, reflecting continued updates in available information (see Addendum 3). |
| General Inflation Rate | Decreased from 2.75% to 2.5% |
| Salary Scale | Decreased from 3.25% to 3.0% |
| Healthcare Trend | Updated to Getzen Model 2022_b, as published by the Society of Actuaries |



Supporting Information

(Concluded)

Section 3 - Actuarial Methods and Assumptions

Changes in assumptions or methods since the prior Measurement Date

(concluded)

Pool Subsidy for
 Medicare retirees

We applied age-based premiums and developed a liability for the projected pool subsidy for retirees enrolled in Medicare plans, under guidance provided by a new actuarial practice note

Retiree Participation Rates

We reviewed recent retiree participation elections by age and bargaining group and updated our assumptions about future retiree participation as described on page 34.

Prior participation rate assumptions are shown below for employees currently enrolled in coverage. Prior assumed rates for those waiving coverage while employed were the rates shown below multiplied by 75%.

| Assumed to Elect Medical Coverage in Retirement | | | | | |
|---|-------------------|--|--|--|--------------------------|
| Group | Age at Retirement | With Medical Coverage and Retiring in 2017 | With Medical Coverage and Retiring in 2019 | Annual Decrease in Percent Electing Coverage | Minimum Percent Electing |
| Admin | Under 62 | 70% | 67% | 1.5% | 50% |
| Admin | 62 or older | 90% | 87% | 1.5% | 70% |
| ATU | Under 62 | 55% | 55% | 1.5%* | 45% |
| ATU | 62 or older | 60% | 60% | n/a | 60% |
| Teamster | Under 62 | 60% | 57% | 1.5% | 45% |
| Teamster | 62 or older | 80% | 77% | 1.5% | 60% |

* Decreased election percentages for future ATU retirees are assumed to begin in 2020, since the retiree benefit level gradually increases until then.

Spouse Coverage

Following a review of recent retiree elections, the percentage of future retirees assumed to elect spouse retirees were reduced from 30% to 20% for ages under 65 and decreased from 50% to 45% for ages 65 and older.

Medicare Eligibility

We added an assumption that unmarried employees identified as not paying into Medicare would have a 50% probability that such employees will remain ineligible for Medicare Part A and Part B coverage.



Appendix 1
Summary of Caps and Expected PEMHCA MEC Increases

The chart below summarizes each of the current single party coverage caps and provides the year in which the PEMHCA Minimum Employer Contribution (MEC) is expected to exceed the cap, based on the assumed annual increase in the MEC of 4.5%.

| Single Party Coverage Caps & Years When MEC is Expected to Exceed the Cap | | | | | | |
|---|------------------------|--|------------------------|--|------------------------|--|
| Group | Administrative | | ATU | | Teamsters | |
| Plan | Single Party Subsidies | Year when MEC is projected to exceed subsidy | Single Party Subsidies | Year when MEC is projected to exceed subsidy | Single Party Subsidies | Year when MEC is projected to exceed subsidy |
| Anthem HMO Traditional | \$ 494.86 | 2049 | \$ 374.92 | 2042 | \$ 374.92 | 2042 |
| Anthem HMO Select | 270.71 | 2035 | 233.59 | 2032 | 226.58 | 2031 |
| Blue Shield HMO | 329.08 | 2040 | 266.47 | 2035 | 280.29 | 2036 |
| Kaiser | 303.56 | 2038 | 235.34 | 2032 | 254.15 | 2034 |
| PERS Platinum | 392.42 | 2044 | 308.08 | 2038 | 308.08 | 2038 |
| PERS Gold | 270.71 | 2035 | 233.59 | 2032 | 226.58 | 2031 |
| United Healthcare | 303.56 | 2038 | 235.34 | 2032 | 254.15 | 2034 |



Addendum 1: Important Background Information

General Types of Other Post-Employment Benefits (OPEB)

Post-employment benefits other than pensions (OPEB) comprise a part of compensation that employers offer for services received. The most common OPEB are medical, prescription drug, dental, vision, and/or life insurance coverage. Other OPEB may include outside group legal, long-term care, or disability benefits outside of a pension plan. OPEB does not generally include COBRA, vacation, sick leave (unless converted to defined benefit OPEB), or other direct retiree payments.

A direct employer payment toward the cost of OPEB benefits is referred to as an “explicit subsidy”. In addition, if claims experience of employees and retirees are pooled when determining premiums, retiree premiums are based on a pool of members which, on average, are younger and healthier. For certain types of coverage such as medical insurance, this results in an “implicit subsidy” of retiree premiums by active employee premiums since the retiree premiums are lower than they would have been if retirees were insured separately. GASB 75 and Actuarial Standards of Practice generally require that an implicit subsidy of retiree premium rates be valued as an OPEB liability.

| Expected retiree claims | | |
|--------------------------------------|---|--|
| Premium charged for retiree coverage | | <i>Covered by higher active premiums</i> |
| Retiree portion of premium | Agency portion of premium Explicit subsidy | Implicit subsidy |

This chart shows the sources of funds needed to cover expected medical claims for pre-Medicare retirees. The portion of the premium paid by the Agency does not impact the amount of the implicit subsidy.

Valuation Process

The valuation was based on employee census data and benefits provided by the Authority. A summary of the employee data is provided in Section 1 and a summary of the benefits provided under the Plan is provided in Section 2. While individual employee records have been reviewed to verify that they are reasonable in various respects, the data has not been audited and we have otherwise relied on the Authority as to its accuracy. The valuation was also based on the actuarial methods and assumptions described in Section 3.

In developing the projected benefit values and liabilities, we first determine an expected premium or benefit stream over the employee’s future retirement. Benefits may include both direct employer payments (explicit subsidies) and/or an implicit subsidy, arising when retiree premiums are expected to be subsidized by active employee premiums. The projected benefit streams reflect assumed trends in the cost of those benefits and assumptions as to the expected date(s) when benefits will end. We then apply assumptions regarding:

- The probability that each individual employee will or will not continue in service to receive benefits.
- The probability of when such retirement will occur for each retiree, based on current age, service and employee type; and



Important Background Information

(Continued)

- The likelihood that future retirees will or will not elect retiree coverage (and benefits) for themselves and/or their dependents.

We then calculate a present value of these benefits by discounting the value of each future expected benefit payment, multiplied by the assumed expectation that it will be paid, back to the valuation date using the discount rate. These benefit projections and liabilities have a very long time horizon. The final payments for currently active employees may not be made for many decades.

The resulting present value for each employee is allocated as a level percent of payroll each year over the employee's career using the entry age normal cost method and the amounts for each individual are then summed to get the results for the entire plan. This creates a cost expected to increase each year as payroll increases. Amounts attributed to prior fiscal years form the "Total OPEB Liability". The OPEB cost allocated for active employees in the current year is referred to as "Service Cost".

Where contributions have been made to an irrevocable OPEB trust, the accumulated value of trust assets ("Fiduciary Net Position") is applied to offset the "Total OPEB Liability", resulting in the "Net OPEB Liability". If a plan is not being funded, then the Net OPEB Liability is equal to the Total OPEB Liability.

It is important to remember that an actuarial valuation is, by its nature, a projection of one possible future outcome based on many assumptions. To the extent that actual experience is not what we assumed, future results will differ. Some possible sources of future differences may include:

- A significant change in the number of covered or eligible plan members
- A significant increase or decrease in the future premium rates
- A change in the subsidy provided by the Agency toward retiree premiums
- Longer life expectancies of retirees
- Significant changes in expected retiree healthcare claims by age, relative to healthcare claims for active employees and their dependents
- Higher or lower returns on plan assets or contribution levels other than were assumed, and/or
- Changes in the discount rate used to value the OPEB liability



Important Background Information

(Continued)

Requirements of GASB 75

The Governmental Accounting Standards Board (GASB) issued GASB Statement No. 75, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. This Statement establishes standards for the measurement, recognition, and disclosure of OPEB expense and related liabilities (assets), note disclosures, and, required supplementary information (RSI) in the financial reports of state and local governmental employers.

Important Dates

GASB 75 requires that the information used for financial reporting falls within prescribed timeframes. Actuarial valuations of the total OPEB liability are generally required at least every two years. If a valuation is not performed as of the Measurement Date, then liabilities are required to be based on roll forward procedures from a prior valuation performed no more than 30 months and 1 day prior to the most recent year-end. In addition, the net OPEB liability is required to be measured as of a date no earlier than the end of the prior fiscal year (the "Measurement Date").

Recognition of Plan Changes and Gains and Losses

Under GASB 75, gains and losses related to changes in Total OPEB Liability and Fiduciary Net Position are recognized in OPEB expense systematically over time.

- *Timing of recognition:* Changes in the Total OPEB Liability relating to changes in plan benefits are recognized immediately (fully expensed) in the year in which the change occurs. Gains and Losses are amortized, with the applicable period based on the type of gain or loss. The first amortized amounts are recognized in OPEB expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to OPEB and are to be recognized in future OPEB expense.
- *Deferred recognition periods:* These periods differ depending on the source of the gain or loss.

Difference between projected
and actual trust earnings:

5 year straight-line recognition

All other amounts:

Straight-line recognition over the expected average remaining service lifetime (EARSL) of all members that are provided with benefits, determined as of the beginning of the Measurement Period. In determining the EARSL, all active, retired and inactive (vested) members are counted, with the latter two groups having 0 remaining service years.



Important Background Information

(Continued)

Implicit Subsidy Plan Contributions

An implicit subsidy occurs when expected retiree claims exceed the premiums charged for retiree coverage. When this occurs, we expect part of the premiums paid for active employees to cover a portion of retiree claims. This transfer represents the current year's "implicit subsidy". Because GASB 75 treats payments to an irrevocable trust or *directly to the insurer* as employer contributions, each year's implicit subsidy is treated as a contribution toward the payment of retiree benefits.

The following hypothetical example illustrates this treatment:

| Hypothetical Illustration of Implicit Subsidy Recognition | For Active Employees | For Retired Employees |
|---|--|---|
| <i>Prior to Implicit Subsidy Adjustment</i> | | |
| Premiums Paid by Agency During Fiscal Year | \$ 411,000 | \$ 48,000 |
| Accounting Treatment | Compensation Cost for Active Employees | Contribution to Plan & Benefits Paid from Plan |
| <i>After Implicit Subsidy Adjustment</i> | | |
| Premiums Paid by Agency During Fiscal Year | \$ 411,000 | \$ 48,000 |
| Implicit Subsidy Adjustment | (23,000) | 23,000 |
| Accounting Cost of Premiums Paid | \$ 388,000 | \$ 71,000 |
| Accounting Treatment Impact | Reduces Compensation Cost for Active Employees | Increases Contributions to Plan & Benefits Paid from Plan |

The example above shows that total payments toward active and retired employee healthcare premiums is the same, but for accounting purposes part of the total is shifted from actives to retirees. This shifted amount is recognized as an OPEB contribution and reduces the current year's premium expense for active employees.



Important Background Information

(Continued)

Discount Rate

When the financing of OPEB liabilities is on a pay-as-you-go basis, GASB 75 requires that the discount rate used for valuing liabilities be based on the yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale). When a plan sponsor makes regular, sufficient contributions to a trust in order to prefund the OPEB liabilities, GASB 75 allows use of a rate up to the expected rate of return of the trust. Therefore, prefunding has an advantage of potentially being able to report overall lower liabilities due to future expected benefits being discounted at a higher rate.

Actuarial Funding Method and Assumptions

The “ultimate real cost” of an employee benefit plan is the value of all benefits and other expenses of the plan over its lifetime. These expenditures are dependent only on the terms of the plan and the administrative arrangements adopted, and as such are not affected by the actuarial funding method.

The actuarial funding method attempts to spread recognition of these expected costs on a level basis over the life of the plan, and as such sets the “incidence of cost”. GASB 75 specifically requires that the actuarial present value of projected benefit payments be attributed to periods of employee service using the Entry Age Actuarial Cost Method, with each period’s service cost determined as a level percentage of pay.

The results of this report may not be appropriate for other purposes, where other assumptions, methodology and/or actuarial standards of practice may be required or more suitable.



Addendum 2: MacLeod Watts Age Rating Methodology

Both accounting standards (e.g., GASB 75) and actuarial standards (e.g. ASOP 6) require that expected retiree claims, not just premiums paid, be reflected in most situations where an actuary is calculating retiree healthcare liabilities. Unfortunately, the actuary is often required to perform these calculations without any underlying claims information. In most situations, the information is not available, but even when available, the information may not be credible due to the size of the group being considered.

Actuaries have developed methodologies to approximate healthcare claims from the premiums being paid by the plan sponsor. Any methodology requires adopting certain assumptions and using general studies of healthcare costs as substitutes when there is a lack of credible claims information for the specific plan being reviewed.

Premiums paid by sponsors are often uniform for all employee and retiree ages and genders, with a drop in premiums for those participants who are Medicare-eligible. While the total premiums are expected to pay for the total claims for the insured group, on average, the premiums charged would not be sufficient to pay for the claims of older insureds and would be expected to exceed the expected claims of younger insureds. An age-rating methodology takes the typically uniform premiums paid by plan sponsors and spreads the total premium dollars to each age and gender intended to better approximate what the insurer might be expecting in actual claims costs at each age and gender.

The process of translating premiums into expected claims by age and gender generally follows the steps below.

1. *Obtain or Develop Relative Medical Claims Costs by Age, Gender, or other categories that are deemed significant.* For example, a claims cost curve might show that, if a 50 year old male has \$1 in claims, then on average a 50 year old female has claims of \$1.25, a 30 year male has claims of \$0.40, and an 8 year old female has claims of \$0.20. The claims cost curve provides such relative costs for each age, gender, or any other significant factor the curve might have been developed to reflect. Section 3 provides the source of information used to develop such a curve and shows sample relative claims costs developed for the plan under consideration.
2. *Obtain a census of participants, their chosen medical coverage, and the premium charged for their coverage.* An attempt is made to find the group of participants that the insurer considered in setting the premiums they charge for coverage. That group includes the participant and any covered spouses and children. When information about dependents is unavailable, assumptions must be made about spouse age and the number and age of children represented in the population. These assumptions are provided in Section 3.
3. *Spread the total premium paid by the group to each covered participant or dependent based on expected claims.* The medical claims cost curve is used to spread the total premium dollars paid by the group to each participant reflecting their age, gender, or other relevant category. After this step, the actuary has a schedule of expected claims costs for each age and gender for the current premium year. It is these claims costs that are projected into the future by medical cost inflation assumptions when valuing expected future retiree claims.

The methodology described above is dependent on the data and methodologies used in whatever study might be used to develop claims cost curves for any given plan sponsor. These methodologies and assumptions can be found in the referenced paper cited as a source in the valuation report.



Addendum 3: MacLeod Watts Mortality Projection Methodology

Actuarial standards of practice (e.g., ASOP 35, Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations, and ASOP 6, Measuring Retiree Group Benefits Obligations) indicate that the actuary should reflect the effect of mortality improvement (i.e., longer life expectancies in the future), both before and after the measurement date. The development of credible mortality improvement rates requires the analysis of large quantities of data over long periods of time. Because it would be extremely difficult for an individual actuary or firm to acquire and process such extensive amounts of data, actuaries typically rely on large studies published periodically by organizations such as the Society of Actuaries or Social Security Administration.

As noted in a recent actuarial study on mortality improvement, key principles in developing a credible mortality improvement model would include the following:

- (1) Short-term mortality improvement rates should be based on recent experience.
- (2) Long-term mortality improvement rates should be based on expert opinion.
- (3) Short-term mortality improvement rates should blend smoothly into the assumed long-term rates over an appropriate transition period.

The **MacLeod Watts Scale 2022** was developed from a blending of data and methodologies found in two published sources: (1) the Society of Actuaries Mortality Improvement Scale MP-2021 Report, published in October 2021 and (2) the demographic assumptions used in the 2021 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, published August 2021.

MacLeod Watts Scale 2022 is a two-dimensional mortality improvement scale reflecting both age and year of mortality improvement. The underlying base scale is Scale MP-2021 which has two segments – (1) historical improvement rates for the period 1951-2017 and (2) an estimate of future mortality improvement for years 2018-2020 using the Scale MP-2021 methodology but utilizing the assumptions used in generating Scale MP-2015. The MacLeod Watts scale then transitions from the 2020 improvement rate to the Social Security Administration (SSA) Intermediate Scale linearly over the 10-year period 2021-2030. After this transition period, the MacLeod Watts Scale uses the constant mortality improvement rate from the SSA Intermediate Scale from 2030-2044. The SSA's Intermediate Scale has a final step in 2045 which is reflected in the MacLeod Watts scale for years 2045 and thereafter. Over the ages 95 to 117, the age 95 improvement rate is graded to zero.

Scale MP-2021 can be found at the SOA website and the projection scales used in the 2021 Social Security Administrations Trustees Report at the Social Security Administration website.



Glossary

Actuarial Funding Method – A procedure which calculates the actuarial present value of plan benefits and expenses, and allocates these expenses to time periods, typically as a normal cost and an actuarial accrued liability

Actuarial Present Value of Projected Benefits (APVPB) – The amount presently required to fund all projected plan benefits in the future. This value is determined by discounting the future payments by an appropriate interest rate and the probability of nonpayment.

CalPERS – Many state governments maintain a public employee retirement system; CalPERS is the California program, covering all eligible state government employees as well as other employees of other governments within California who have elected to join the system

Defined Benefit (DB) – A pension or OPEB plan which defines the monthly income or other benefit which the plan member receives at or after separation from employment

Deferred Contributions – When an employer makes contributions after the measurement date and prior to the fiscal year end, recognition of these contributions is deferred to a subsequent accounting period by creating a deferred resource. We refer to these contributions as Deferred Contributions.

Defined Contribution (DC) – A pension or OPEB plan which establishes an individual account for each member and specifies how contributions to each active member's account are determined and the terms of distribution of the account after separation from employment

Discount Rate - Interest rate used to discount future potential benefit payments to the valuation date. Under GASB 75, if a plan is prefunded, then the discount rate is equal to the expected trust return. If a plan is not prefunded (pay-as-you-go), then the rate of return is based on a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

Expected Average Remaining Service Lifetime (EARSL) – Average of the expected remaining service lives of all employees that are provided with benefits through the OPEB plan (active employees and inactive employees), beginning in the current period

Entry Age Actuarial Cost Method – An actuarial funding method where, for each individual, the actuarial present value of benefits is levelly spread over the individual's projected earnings or service from entry age to the last age at which benefits can be paid

Explicit Subsidy – The projected dollar value of future retiree healthcare costs expected to be paid directly by the Employer, e.g., the Employer's payment of all or a portion of the monthly retiree premium billed by the insurer for the retiree's coverage

Fiduciary Net Position – The value of trust assets used to offset the Total OPEB Liability to determine the Net OPEB Liability.

Government Accounting Standards Board (GASB) – A private, not-for-profit organization which develops generally accepted accounting principles (GAAP) for U.S. state and local governments; like FASB, it is part of the Financial Accounting Foundation (FAF), which funds each organization and selects the members of each board

Health Care Trend – The assumed rate(s) of increase in future dollar values of premiums or healthcare claims, attributable to increases in the cost of healthcare; contributing factors include medical inflation, frequency or extent of utilization of services and technological developments.



Glossary

(Continued)

Implicit Subsidy – The projected difference between future retiree claims and the premiums to be charged for retiree coverage; this difference results when the claims experience of active and retired employees are pooled together and a ‘blended’ group premium rate is charged for both actives and retirees; a portion of the active employee premiums subsidizes the retiree premiums.

Net OPEB Liability (NOL) – The liability to employees for benefits provided through a defined benefit OPEB. Only assets administered through a trust that meet certain criteria may be used to reduce the Total OPEB Liability.

Net Position – The Impact on Statement of Net Position is the Net OPEB Liability adjusted for deferred resource items

OPEB Expense – The OPEB expense reported in the Agency’s financial statement. OPEB expense is the annual cost of the plan recognized in the financial statements.

Other Post-Employment Benefits (OPEB) – Post-employment benefits other than pension benefits, most commonly healthcare benefits but also including life insurance if provided separately from a pension plan

Pay-As-You-Go (PAYGO) – Contributions to the plan are made at about the same time and in about the same amount as benefit payments and expenses coming due

PEMHCA – The Public Employees’ Medical and Hospital Care Act, established by the California legislature in 1961, provides community-rated medical benefits to participating public employers. Among its extensive regulations are the requirements that a contracting Agency contribute toward medical insurance premiums for retired annuitants and that a contracting Agency file a resolution, adopted by its governing body, with the CalPERS Board establishing any new contribution.

Plan Assets – The value of cash and investments considered as ‘belonging’ to the plan and permitted to be used to offset the AAL for valuation purposes. To be considered a plan asset, GASB 75 requires (a) contributions to the OPEB plan be irrevocable, (b) OPEB assets to dedicated to providing OPEB benefit to plan members in accordance with the benefit terms of the plan, and (c) plan assets be legally protected from creditors, the OPEB plan administrator and the plan members.

Public Agency Miscellaneous (PAM) – Non-safety public employees.

Select and Ultimate – Actuarial assumptions which contemplate rates which differ by year initially (the select period) and then stabilize at a constant long-term rate (the ultimate rate)

Service Cost – Total dollar value of benefits expected to be earned by plan members in the current year, as assigned by the actuarial funding method; also called normal cost

Total OPEB Liability (TOL) – Total dollars required to fund all plan benefits attributable to service rendered as of the valuation date for current plan members and vested prior plan members; a subset of “Actuarial Present Value”

Vesting – As defined by the plan, requirements which when met make a plan benefit nonforfeitable on separation of service before retirement eligibility

